



MINE SAFETY APPLIANCE CO

Ac/s

P.G. 12/31/01

REC'D S.E.C.

MAR 29 2002



02029700



Safety for Heroes



PROCESSED

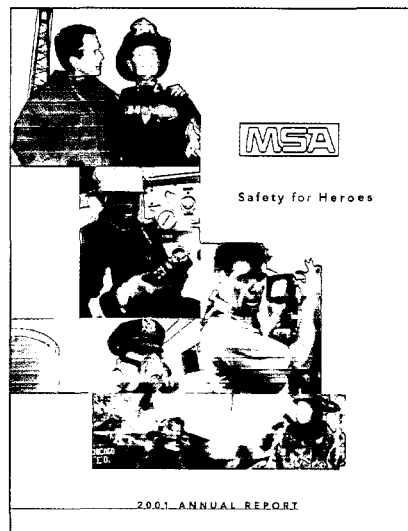
APR 09 2002

THOMSON
FINANCIAL



2001 ANNUAL REPORT

For MSA, 2001 served as a powerful reminder of the need to provide **Safety for Heroes**. The events of September 11 forever etched in our hearts and minds what it means to be a hero. For us at MSA, that tragic day also gave us reason to pause and reflect on the importance of our mission: that men and women may work in safety. From the emergency workers tasked with searching the devastation of the World Trade Center to the lone oil refinery worker finishing his shift in Brazil, heroes are found almost anywhere. Some are heroes to a nation, while others are simply heroes to their children. In



Cover Photo Credits: Top: AP Wide World Photos
Middle right: Andrew Savulich/New York Daily News
Bottom: AP Wide World Photos

the safety profession, each one is significant. For 88 years, MSA has delivered on its promise of protecting heroes wherever they are found. In a year like no other, providing **Safety for Heroes** took on new meaning, and fittingly serves as our theme for this year's annual report.

The Business of MSA	1
Chairman's Letter	2
Fire Service	4
A Firefighter's Firefighter	5
Homeland Security	6
Industrial & Consumer	8
A Hero for São Paulo	9
A Day We Will Never Forget	10
Specialty Chemicals	12
Financial Contents	13
Management's Discussion and Analysis	14
Responsibility Statements	20
Consolidated Statement of Income	21
Consolidated Balance Sheet	22
Consolidated Statement of Cash Flows	23
Consolidated Statement of Changes in Retained Earnings and Accumulated Other Comprehensive Income	24
Notes to Consolidated Financial Statements	25
Summary of Selected Financial Data	33
Principal Operations, Directors and Corporate Officers	34

2001 Annual Report

Financial Highlights

For the Year
(Thousands, except per share)

	2001	2000	1999
Net sales	\$542,856	\$500,367	\$497,908
Net income	31,631	23,239	15,134
Earnings per share	2.65	1.89	1.16

At Year End (Thousands)

Total assets	\$520,698	\$489,683	\$451,741
Working capital	135,186	114,175	123,085
Common shareholders' equity	252,451	225,382	241,374

Common Stock (Thousands)

Shares outstanding	12,101	11,828	12,875
Market capitalization	\$485,844	\$297,169	\$274,624

Sales

(in millions)

		\$543
\$498	\$500	+8%

Net Income

(in millions)

	\$31.6	
		+36%
\$23.2		
		+54%
\$15.1		

99 00 01

99 00 01

Safety Products and Instruments

The primary business of MSA is the manufacture and sale of products designed to protect the safety and health of people throughout the world. MSA offers thousands of products to a diverse range of industries and businesses, and also sells to the consumer marketplace under the MSA Safety Works® brand.

MSA's principal products include respiratory protection equipment, portable and permanent instruments that monitor and analyze workplace environments, as well as head, eye, face, hearing and fall protection.

These products have wide application for workers in industries that include the fire service, homeland security, construction, manufacturing, public utilities, mining, chemicals, petroleum, transportation, the military and hazardous materials clean-up. Consumer products target the do-it-yourself market and are available through select home center retail outlets.

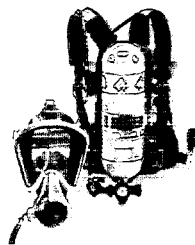
Founded in 1914 by John T. Ryan and George H. Deike, MSA maintains its world headquarters in Pittsburgh, Pa. The company has approximately 4,100 employees worldwide. A publicly held company, MSA's stock is traded on the American Stock Exchange under the symbol MSA.

Specialty Chemicals

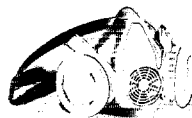
Callery Chemical Company, founded in 1948, is the world's leading supplier of commercial quantities of borane chemicals, metal alkoxides and alkali metals. Callery produces these products for a variety of applications, including pharmaceuticals, government, industry, and research and development. Revenue in 2001 was \$32.8 million.

While the pharmaceutical industry is Callery's largest market, other applications can be found in electronics, computers, automotive air bags, respiratory and environmental protection equipment, agrichemicals, plastics, flavors and fragrances, and polymers.

Callery currently markets its products directly in the U.S., Europe, Southeast Asia and India. In addition, Callery has a broad network of agents in 15 countries around the world.



MMR XTREME® Air Mask

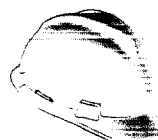


Advantage® 200 LS Respirator



Titan™ Combustible Gas Detector

Pulsar™ Single-Gas Detector



V-Gard® Hardhat



Lynx™ Rescuer for Fall Protection

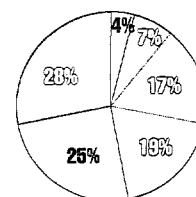


Evolution® 4000 TIC



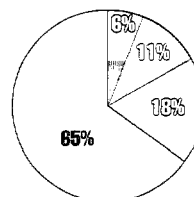
Specialty Chemicals

Safety Product and Instrument Sales by Product



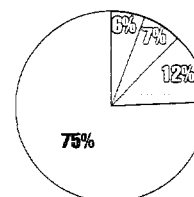
- Air-Supplied Respirators
- Air-Purifying Respirators
- Instruments
- Head Protection (Helmets, Eye, Face & Hearing)
- Fall Protection
- Other

Safety Product and Instrument Sales by Region



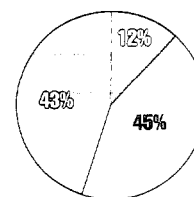
- North America
- Europe
- Asia & Pacific Rim
- South America/Africa

Specialty Chemical Sales by Market



- Pharmaceutical
- Electronic & Industrial
- Plastics
- Agchem

Specialty Chemical Sales by Region



- North America
- Europe
- Asia & Pacific Rim

To Our Shareholders, Associates, Customers and Vendors:

2001 was a powerful year. We at MSA mourn for the people we knew, our friends who were lost saving and protecting life on September 11, many of whom used MSA thermal imaging cameras and other products that day, just as they had on other days when called into action. We also mourn for those we did not know — people from more than 80 countries who perished in three locations.

I am proud of our MSA people for their contributions in supplying vital products and training to those who were tasked with responding to this enormous tragedy. After we, like all others of good will, cursed the Darkness of that day, we were privileged in our work to be able to light a candle of assistance. Helping those who must deal with disasters has been a legacy of MSA and the fabric of our culture since the company's inception. This tradition of readiness and effective response was clearly evident that day, as was the depth of our management team. With six of the nine U.S.-based officers, including myself, away visiting customers, attending trade conferences, or investigating an acquisition, the team moved effectively to take appropriate action.

Since its founding in 1914, MSA has had one mission: protection of human life. From the early days of providing equipment to improve the working conditions in the coal mines of western Pennsylvania to today, MSA believes that every worker is a hero.

Today, as the leading innovator and provider of a full line of safety products and services, our mission remains the same. We provide *Safety for Heroes*. MSA equipment is protecting the health and safety of workers throughout the world — in mining and industry, the fire service, law enforcement, homeland security, the military and even in the home.

These last ten years have been a time of great change in the global economy and particularly in markets MSA serves. Substantial improvements in the way we do business were necessary to meet these challenges. These have been pursued for a number of years. Progress did not come easily and some important processes were, by their nature, ones that required considerable lag time from the application of the effort to the point when results could be seen on the company's measured performance. In late 1999, MSA established goals to make financial progress essential to the company's future. The key objective was to double earnings in three years. I am most pleased to report that our MSA team accomplished this goal in two. I deeply appreciate the contributions of all my fellow

MSA associates in this most meaningful achievement. This was done despite a serious economic recession that began in the U.S. manufacturing sector during 2000 and spread to the global economy.

For 2001, MSA's net income totaled \$31.6 million, the highest in company history, on record sales of \$542.9 million. This performance is a direct result of our unwavering focus on our mission and the fruits of significant initiatives that we have undertaken in recent years to improve the company's performance, particularly in the areas of new products, market development and operational excellence.

In 2002 and beyond, MSA will certainly face further challenges and will establish new goals to reach. Our continued focus on quality, customers, process improvements and other key initiatives will be the way to get there.

Significant progress was made in 2001 on all of MSA's geographic fronts. Particularly noteworthy was the turnaround and return to profitability of MSA Europe. Three years of effort in Europe at the basics of product development, processes and improved strategies bore fruit in the P&L results in the third year.

Other distinctive areas of major progress were the Safety Products Division in North America and MSA operations in Argentina, Brazil and Japan, all of which excelled in spite of particularly difficult local economic conditions.

New Products

MSA has dramatically expanded the breadth of its safety product offerings through research and development and targeted acquisitions. To best meet the safety equipment needs of workers throughout the world, MSA several years ago established global product steering teams and global product design teams. Particularly over the last 18 months, this process has yielded exciting results. The Evolution® line of Thermal Imaging Cameras, the Orion® Multigas Detector, the Firehawk™ and AutoMaxx™ breathing apparatus regulators, the Advantage® 3000 and Advantage® 200 LS Respirators and the Pulsar™ Single-Gas Detector are noteworthy recent contributions. All were designed from the start to meet all key global standards.

We have also expanded our product offerings through acquisitions of businesses that complement MSA's traditional product lines and enhance our core competencies. Recent product line acquisitions include the CairnsHELMETS® line of firefighter head protection and the Surety™ line of fall protection equipment. More details on these products, and others, are included later in this report.

John T. Ryan III presents the 2001 Product of the Year Award to the team that produces Evolution® 4000 Thermal Imaging Cameras (TIC). The assembly of the Evolution 4000 TIC represents a collaborative effort between MSA's Safety Products and Instrument Divisions.

Looking ahead, MSA has agreed to acquire CGF Gallet of France, the leading European manufacturer of protective helmets for the fire service, as well as for the police and military markets. The Gallet acquisition, which is expected to be completed in the first half of 2002, will enhance our already strong product line to the fire service, our largest market.



Focused Market Development

MSA has concentrated on identifying new market opportunities and more effectively satisfying the needs of customers in established markets. Homeland security and highway construction are examples of priority markets on which MSA began focusing over four years ago and which have become substantial contributors to our North American business. While regional projects in sales, marketing and operations are in place, our efforts are global in scope. Particular results have been seen in Central and Eastern Europe, Sub-Saharan Africa and South America. MSA Safety Works, our consumer division, met major sales goals in 2001.

Operational Effectiveness

Managing our business to the highest levels of efficiency and productivity is a key element in our corporate strategy and a significant reason for MSA's recent progress. I am very pleased with the 2001 performance in safety products factories in North America and at MSA Auer in Berlin, where manufacturing and administration costs, factory utilization and efficiencies were considerably improved, allowing us to reach our goals. Restructuring of operations in Canada, Great Britain and Sweden also meaningfully reduced MSA's operating costs in those countries.

MSA introduced e-business capabilities in North America that now give our distributor-partners direct access to inventory availability, order and account status information on a real-time basis. Our electronic product catalog is accessible to all. Additional e-business capabilities, as well as expanded access to this system for key customers in Europe and elsewhere, will be coming soon.

Particularly in times of rapid change, an organization needs to have values — both ethical and strategic — to help its people individually and collectively evaluate and set objectives. With this foundation in place, we then work to harness the sometimes brute and generally inevitable forces of change and the opportunities of new technologies for the benefit of customers, the organization, one's family, self and fellow humanity. MSA's values have been crucially useful in guiding us through these difficult times.

An element of our values that is relevant to matters of current business news is MSA's conservative and straightforward approach to accounting and financial reporting. This tradition and our related sound financial structure have been a building block of MSA's long-term success. I urge you to read carefully the financial statements and related footnotes and management's discussion and analysis contained in this report. This information, combined with the product and operational discussions in the following sections of this report, should provide you with a clear, uncomplicated and in-depth picture of our financial results and condition, our business, and our outlook.

We have lived enough in both good and difficult times to soberly recognize the continuing challenges that life brings, especially in a free competitive global economy with technologies that are ever moving forward. Our satisfaction in recent accomplishments can be sipped for a few moments, but then we must move on to make needed progress in 2002 and beyond.

Our goals are to fully reach our potential in our current and related markets, to gain in this progress attractive sales growth and, particularly, to reach and enhance solid profitability. We want to get "ahead of the game" in our pursuit of solid profitability, which will lead to more opportunities at MSA for building even greater long-term success.

For 2002, MSA's position in many key sales and product areas is strong. We are focused on our customers, our products and our effectiveness. While we will regularly look for acquisition prospects that enhance our core business, our primary focus at MSA will be on maintaining and enhancing current momentum and building from strength. The leading position we have built up over many years in Domestic Preparedness/Homeland Security products should generate particularly good gas mask business in 2002. We will work to capture as much of this business as possible, but not at the expense of making significant progress on the balance of our business, so that as product life cycles move onward, MSA can move from strength to strength.

Particular challenges in 2002 will be the ongoing threat of terrorism to the world and its potential consequences, the still weak and not-yet-bottomed-out global economy, particularly in Continental Europe and in the raw material producing countries of the world, and our own need to solidify and further improve the major gains of 2000 and 2001.

Another somber milestone in 2001, for us at the company, was the passing of Leo N. Short, Jr., my predecessor as Chairman and CEO of MSA. He achieved well his personally expressed lifetime goals of being "a good husband, a good father, and a good businessman." All of us at the company appreciate his important contributions to MSA.

Within the executive offices of MSA, there is a display about the legacy of the company containing notes from our founders about their work in mine disaster rescue 90-plus years ago. It reads, "The suffering and distress we witnessed during these experiences so overwhelmed us that we were determined together to dedicate our efforts to the prevention, if possible, of such catastrophes."

The numbers of those killed in coal mines in that era were striking and tragic at 2,500 per year. Yet, we lost more than that in two hours on September 11.

The display concludes, "For more than a quarter century they engineered, pioneered, crusaded together in the great work and noble cause of saving human life."

For all of us at MSA, it is our privilege and deep responsibility to carry on, against new dangers in our world, this spirit of those who went before us and further pursue this noble cause — "That men and women may work in safety and that they, their families and their communities may live in health throughout the world."



John T. Ryan III
Chairman of the Board
and Chief Executive Officer



Fire Service Market

When Heroes Battle Fire, MSA Proudly Protects Them

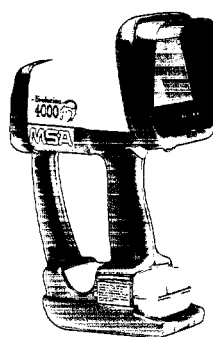
When terrorists attacked America on September 11, firefighters, police and other first responders acted with valor and courage, and many made the ultimate sacrifice. In 2001, MSA was particularly proud to play a growing role in protecting the lives of firefighters in the United States and around the world.

MSA sales to the U.S. fire service market rose sharply in 2001, fueled by higher sales of self-contained breathing apparatus products, fire helmets, thermal imaging cameras and homeland security products. MSA has been a leader in supporting and serving firefighters for almost 90 years. Today the fire service is MSA's largest market.

During the year, MSA focused on establishing long-term relationships with large municipal fire departments that offer growth potential and represent brand leadership. This business strategy resulted in new contracts from some of America's largest municipal fire departments and enhanced MSA's strength in the fire service market.

FDNY Orders MSA Thermal Imaging Cameras

In early 2001, MSA was awarded a contract to supply more than 150 Evolution® 4000 Thermal Imaging Cameras to the Fire Department of New York City. The Evolution 4000 cam-



Evolution® 4000

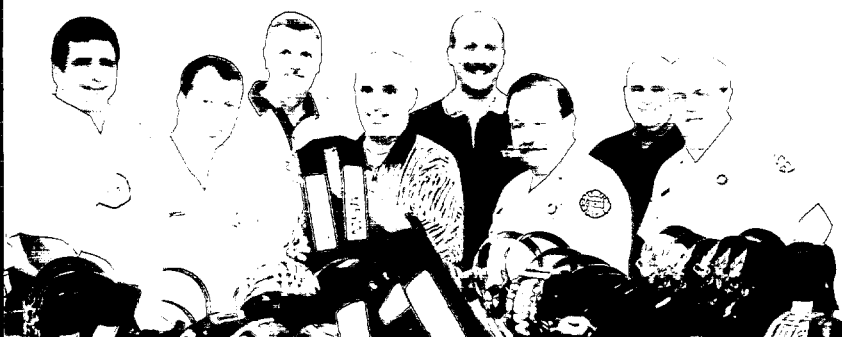
era is the latest advance in thermal imaging cameras, which use infrared technology to help firefighters find and rescue people in dark, smoke-filled environments. Designed with input from firefighters and developed and manufactured by MSA, the hand-held Evolution 4000 TIC is the industry's only big-screen, high-definition thermal imaging camera. Its breakthrough design offers increased versatility and clearer imaging in a rugged, lightweight, fully sealed high-temperature housing.

Chicago Gets XTREME

In the Midwest, another one of the nation's largest fire departments placed its trust in MSA for advanced respiratory protective equipment. The Chicago Fire Department awarded a contract to MSA to supply 1,100 MMR XTREME® Air Masks for city firefighters.

Announced in October 2001, the Chicago contract was the single largest award for a self-contained breathing apparatus purchase by a municipal fire department. The advantages of the MMR XTREME Air Mask include advanced features such as the patented Quick-Fill® System, which enables users to quickly replenish their air supplies without cylinder changeover, and the Ultra Elite® Facepiece, which improves voice communication clarity.

CairnsHELMETS® from MSA continued to set the standard for firefighter head protection. The CairnsHELMETS brand, synonymous with quality and tradition, features helmets that are engineered to absorb impact and deflect debris



The Chicago Fire Department upgraded its safety equipment technology in 2001 by outfitting its firefighters with MMR XTREME® Air Masks.



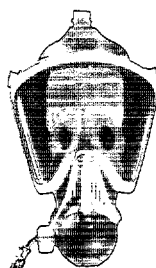
In 2001, MSA secured several major fire service contracts with large cities, including Barcelona, Spain.

away from a firefighter's head. The patented shell-release system allows a firefighter to escape dangerous situations when the helmet becomes entangled in debris. Firefighters can choose from 11 styles in the CairnsHELMETS line that are designed for a wide range of applications and preferences.

Fire Service in Europe Heats Up

MSA's impressive growth in the fire service market extended beyond the North American borders. MSA Spain, for instance, received a major order from the Barcelona Harbor Authority to supply the AirMaXX™ compressed air breathing apparatus system carrier and harness assembly, and a related product, the AutoMaXX™ lung-governed demand valve, for Barcelona and Alicante firefighters. AirMaXX and AutoMaXX products are manufactured by MSA Auer in Germany.

Aiming for increased global growth, particularly in Europe, MSA announced an agreement in December 2001 to acquire CGF Gallet of France, the leading European



Firehawk™ MMR

manufacturer of protective helmets for firefighters. MSA expects to complete the acquisition in the first half of 2002.

Gallet will become part of MSA Europe and will continue to operate from its current location near Lyon, France. The acquisition will complement and broaden MSA's strong fire service product line.

To be sure, in a year when MSA reported record sales and earnings, the growing fire service business was one of the key drivers of the company's outstanding financial performance.

But what counts most of all is this: MSA's fire service products are saving the lives of heroes who face one of the world's greatest dangers — fire — day in and day out. In a world where fire is a constant danger, MSA continues to be a constant source of protection for firefighters everywhere.

A Firefighter's Firefighter

Captain Patrick J. (Patty) Brown was eulogized by New York Mayor Rudy Giuliani as a "fallen warrior and a great patriot" on what would have been the firefighter's 49th birthday. Giuliani went on to call him a legend in the life of FDNY.

As one of the most decorated members of FDNY, Captain Brown earned more than 20 citations for the valor he displayed throughout his career. Despite his movie-star good looks and the admiration of his peers, he remained humble. He maintained the physical and mental stamina necessary to perform death-defying rescues by running marathons and practicing yoga with a vengeance.

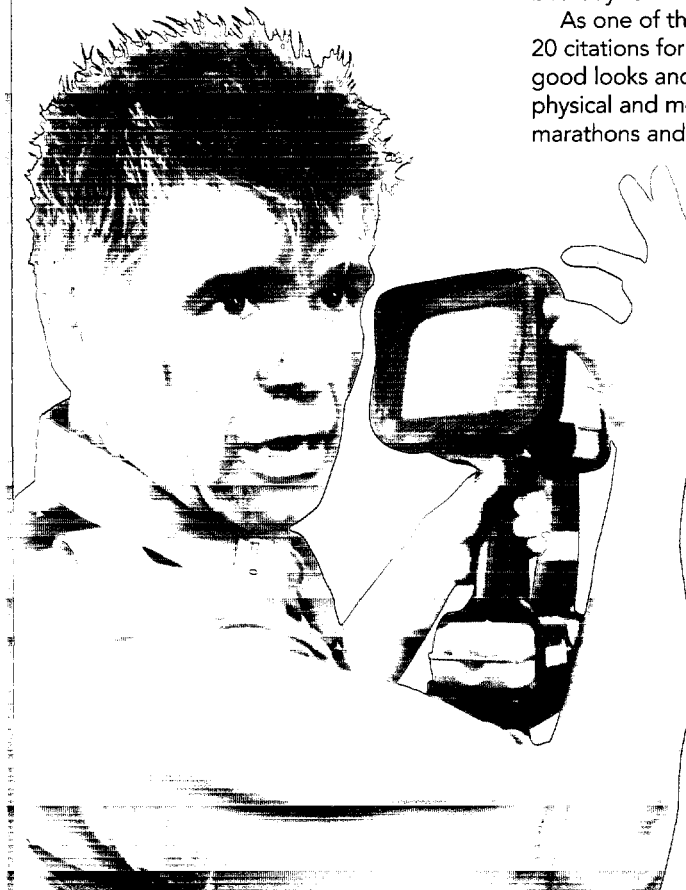
But his commitment to helping others went well beyond the call of duty. Captain Brown always donated the monetary awards from his valor citations to charity. In his spare time, he put his second-degree black belt to good use and taught karate to the blind.

A highly decorated Marine Corps sergeant who served two tours of duty in Vietnam, he inspired fellow firefighters by example. And on September 11, he died as he had led his life — working selflessly to save the lives of others. Captain Brown and eleven of his men, many off duty, died helping burn victims on the 40th floor of Tower One in the World Trade Center.

Captain Brown's spirit lives on through the men he mentored in FDNY's Ladder Company Three, as well as the many people whose lives he touched through his professional and personal acts of kindness and sacrifice. The associates at MSA salute this true American hero.

Captain Patrick Brown

Captain Brown's heroic rescues often earned him a spot on the evening news. Here, he addressed the media in April 2001 following a fire in Waterside Plaza. He credited MSA's Evolution 4000 TIC with helping to save the lives of firefighters from a deadly flashover.





Homeland Security

Making Our Homeland Safer and More Secure

In these extraordinary times, MSA, a leading manufacturer of gas masks since World War I, is taking extraordinary measures to protect the millions of heroes who protect safety and security throughout the world. With innovative products that offer state-of-the-art respiratory protection, MSA is playing a vital role as a major supplier of gas masks for government and military personnel, first responders, law enforcement officers and firefighters.

The terrorist attacks on September 11 stirred the strength, courage and spirit of the American people. But it was a stark reminder that the world must be more prepared than ever before to protect its people and heroes from terrorist attacks, including chemical and biological warfare threats. As a result, MSA has intensified and broadened its focus on homeland security — a market MSA has served for four decades.

In the wake of September 11, the urgent need for respiratory protection significantly increased the domestic demand for MSA gas masks, particularly the military MCU-2P mask, the Millennium® Chemical-Biological Gas Mask and the Advantage® 1000 CBA-RCA Gas Mask.

High-Performance Protection

Technology, reliability, performance and value are the hallmarks of MSA gas masks. The MCU-2P mask has helped protect U.S. Armed Forces in combat situations, including Operation Desert Storm in 1991 and the current campaign against terrorism in Afghanistan. The Millennium and Advantage gas masks provide effective, high-performance protection against biological agents and a variety of chemical warfare agents, while offering customized fit, comfort and cost efficiency.





MSA has supplied gas masks to the U.S. military since World War I and to law enforcement agencies for more than four decades.



Since September 11, MSA's gas mask manufacturing facilities have worked at maximum capacity to meet increased demand.

Faced with higher demand in the last four months of 2001, MSA took action to increase its gas mask manufacturing capacity to meet the needs of customers.

Following September 11, MSA has ensured that customers who have the most critical need for gas masks, particularly the U.S. military and law enforcement personnel, receive them on a priority basis through authorized distribution channels only. The company's immediate goal after September 11 was to get MSA gas masks to those first responders who are on the front lines of homeland security.

A Calming Voice in the Storm

In 2001, MSA also played a vital role in educating the public about gas masks, their capabilities and the need for proper training and fit testing. This informative effort included public outreach and news coverage about MSA gas masks in *Time* magazine, *The Washington Post*, *The Wall Street Journal* and other media publications and outlets. MSA continues to provide this support and invites the public to visit MSA's Web site for more information on this crucial topic. Just type www.MSAnet.com and click on the box titled MSA Gas Masks and Homeland Security.

As the U.S. continues to strengthen its national security procedures, MSA is well positioned to enhance its market position as a leader in serving the growing Homeland Security market. With a strong track record and a reputation for manufacturing excellence, MSA is also focusing on developing new products that address national security concerns.

In the first half of 2002, for example, MSA expects to introduce the Response™ Escape Hood. This product is specifically designed to help people escape hazardous atmospheres, including terrorist situations where chemical and biological threats may be present. Its see-through design offers a large field of vision, thereby not hampering the user's escape. In today's world, there are broad market applications for this product.

The Response Escape Hood is the latest example of why MSA has been a leader in gas mask technology since 1914. In a world where ever-changing forces threaten the safety and security of America and its allies, MSA is a constant source of protection and a trusted ally in the battle for safety.



Scheduled for introduction in the second quarter of 2002, the Response™ Escape Hood allows workers to quickly escape from environments with chemical or biological agents.

MSA's global mining sales team visits the El Teniente mine in Chile, which is operated by Codelco.

Industrial & Consumer Markets

Protecting the Heroes of Industry

Heroes are defined in many ways. In fact, they don't always wear a uniform, a fire helmet or carry a badge. The truth is men and women working on the front lines of industry are everyday heroes. They manufacture cars, steel, durable goods or consumer products. They build homes and office buildings. They work below the ground or at sea to unearth vital sources of energy. Around the world, these heroes are protected on the job by MSA.

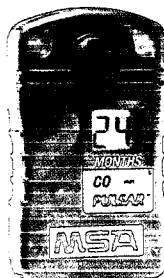
In 2001, sales of MSA products to the industrial market increased despite challenging global economic conditions. MSA's strong roster of industrial safety products includes hardhats, respirators, gas monitoring instruments and fall protection equipment. Respirator sales in 2001 got a boost from the successful launches of two new products: the Advantage® 3000 Full-Face Respirator and the Advantage® 200 LS Half-Mask Respirator.

The Advantage 3000 Respirator is an innovative full-face-piece air-purifying mask that meets industry and government standards in many different countries. A truly global product, its design is based on concepts gleaned from worldwide research that included feedback from customers in more than 10 countries. The Advantage 3000 Respirator offers greater convenience, superior peripheral vision, added comfort and high-performance protection at an affordable price.

For customers who prefer or need a half-mask alternative, the Advantage 200 LS Respirator provides a great solution. A sister product to the Advantage 3000 model, it is lighter with a softer feel on the face than its leading competitors and uses accessories that are interchangeable with those of its full-face counterpart.

MSA's focus on innovation generated other exciting new products in 2001. One of the most successful was the Orion® Multigas Detector, a four-gas portable detector. Sales of Orion units were exceptionally strong in its first year on the market.

The Orion Detector features one-button calibration, rugged construction and a remarkable 16- to 20-hour run time. With an internal pump and charger included, the Orion model offers a better value than most competitive



Orion Multigas Detector

four-gas detectors now on the market, making it ideal for confined space entry in industrial, agricultural, and other environments, as well as fire and rescue applications.

MSA also unveiled the Pulsar™ Single-Gas Detector, a portable warning system that is so small it can be carried inside a user's pocket. The Pulsar Detector enables users to see, feel and hear the presence of potentially dangerous gases by delivering a series of audible, vibrating and visual alarms the instant it senses a hazard. The unit is designed for global applications, including the petrochemical, chemical, construction, metals, pharmaceutical and utility industries.

Sales of MSA eye and face protection equipment rose in 2001, and MSA hardhats once again were the market leaders in head protection. The MSA V-Gard® Cap remained the most widely used hardhat in industry.

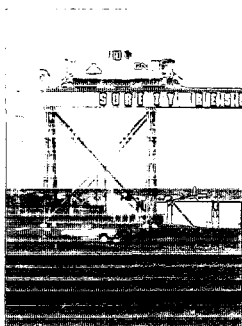
Industrial Safety: A Worldwide Mission

MSA safety products are now available in more than 140 countries and are supported globally by 27 international MSA affiliates. Around the world and in any language, the MSA brand stands for high performance and quality protection.

In Europe, for example, MSA Auer, based in Berlin, won the prestigious RedDot Design Award for the AirMaXX unit, its new compressed air breathing apparatus system carrier and harness assembly. Designed for use in the fire service as well as many other industries, the AirMaXX unit earned the annual international award for outstanding product design.



MSA's industrial safety equipment is on the job in a variety of applications, including construction, mining, petrochemical processing, oil and gas extraction, manufacturing and in the home.



Fall protection equipment provider Surety Manufacturing, acquired by MSA in 2001, is well known for its training and testing facility that includes a 93-meter railway trestle bridge.

In North America, MSA enhanced its position in the industrial safety market by acquiring Surety Manufacturing and Testing, Ltd., a leading Canadian provider of fall protection equipment and rescue systems to the railway, construction and utility markets. Surety's product line complements the MSA Rose product line and enhances MSA's market opportunities in the U.S. and North and South America.

As MSA's portfolio of new products expanded, the company intensified its focus on driving sales growth through its international affiliates. In 2001, MSA launched a three-year initiative to achieve significant annual sales

growth in markets including Australia, South America, Africa, Japan/Korea/Taiwan, China, the Middle East and India. The initiative creates a seamless global structure by linking each of these regions through industry-specific Global Sales and Distribution Teams and by sharing and integrating the skills of MSA's operations in the U.S. and Europe.

Safety on the Job and at Home

An extension of the company's expertise and leadership in industrial safety, MSA Safety Works continued to expand its market position and remained the fastest growing brand of consumer safety products for the fourth consecutive year. MSA Safety Works, which markets products for consumers and contractors, has become a leader in the "do-it-yourself" home safety market. Sales of MSA Safety Works products doubled in 2001. Its products are now on the shelves of leading home center retailers, including more than 600 Home Depot stores in the U.S.

Wherever people are on the job — on the factory floor, at a construction site or at home — MSA is the first line of protection for the world's unsung heroes.

A Hero for São Paulo

Altair do Espírito Santo works as a process operator at Chevron Oronite Brasil's Mauá manufacturing plant. As a subsidiary of Chevron Corporation, Chevron Oronite Brasil produces and sells additives for lube oil and fuels in Latin America.

Oronite additives are blended with refined oil or fuel and used in a variety of diesel and gas engines. Because the chemicals processed at the plant are flammable, an experienced and dedicated emergency brigade is essential. As a member of the emergency brigade, Altair responds to and helps prevent many high-risk situations, including gas leaks, explosions and fires.

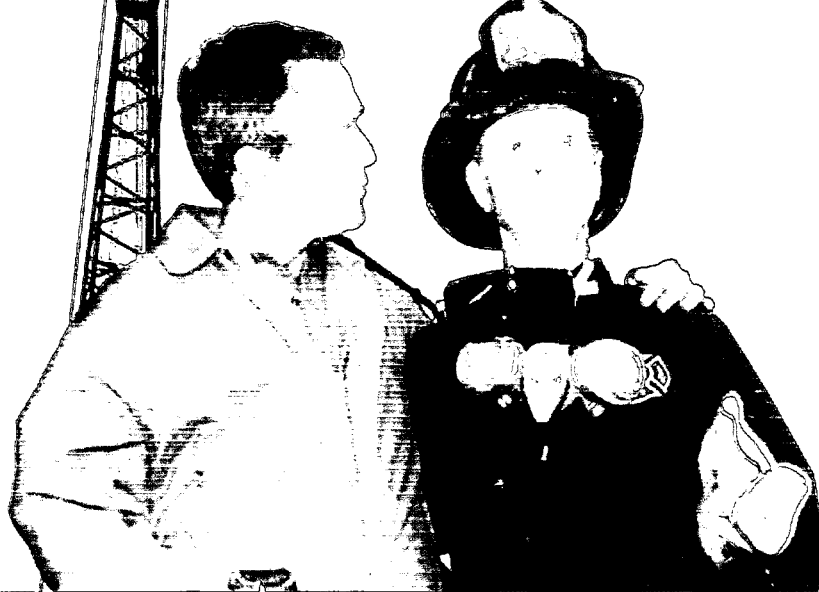
But Altair's most important work doesn't begin until he leaves Chevron. As one of the 19 million adult Brazilians who volunteer to help the needy, Altair donates his time every week to help his local Friend District Association provide shelter, food and medicine to poverty-stricken families in São Paulo. With his wife, Rosimeire F.S. do Espírito Santo, and his two children, Juliane do Espírito Santo, 14, and Caio do Espírito Santo, 10, he collects donations and distributes them to the needy.

Through his volunteer service, Altair is a hero to his community. MSA is proud to help protect him at his job, so that he can continue to serve the less fortunate in São Paulo.

Altair do Espírito Santo

As a member of his petrochemical plant's emergency brigade, Altair do Espírito Santo is well-trained and prepared to respond to many potentially dangerous situations using an MMR XTREME® Air Mask.





AP Wide World Photos

At ground zero, President George Bush embraces a firefighter who is wearing an Advantage® 200 Respirator and a Cairns HELMETS® fire helmet.

A Day We Will Never Forget

MSA was founded in 1914 to help reduce the horrors of mining disasters and to make safety equipment for workers whose jobs put them in harm's way. None of us, however, could have ever imagined the devastation on September 11, 2001 in New York City, Washington, D.C. and the rural hills of western Pennsylvania. While the world stood still, we realized that MSA could not.

On September 11, firefighters, police officers and emergency workers rushed into action to serve humanity. While saving others — including our own Judy Colfer, MSA's acting director of logistics, who was 15 minutes into a seminar on the 55th floor of One World Trade Center — many lost their own lives.

Product Shipments to Washington, D.C., New York City and Somerset, Pa.

In the aftermath, workers at ground zero, the Pentagon and in Pennsylvania needed help — fast. Within eight hours of the attacks, MSA shipped more than three truckloads of equipment from various MSA facilities directly to the disaster sites.

In one case, Pennsylvania State Police escorted a truck from MSA's Murrysville, Pa., plant to the New Jersey border, where New Jersey State Police then provided escort into lower Manhattan.

The products MSA shipped included thermal imaging cameras, respirators, breathing apparatus for firefighters, protective eyewear and gas detection instruments. Thousands of hardhats emblazoned with special "United We Stand" lettering and an American flag also were delivered to the disaster sites. In short, what began as a normal Tuesday became the most intense Tuesday in company history.

Whatever It Takes

In the wake of September 11, MSA associates were determined to help in the best way they could — providing rescue workers with protective equipment. They acted quickly and decisively, taking on a "whatever we need to do to get the job done" attitude. And many of MSA's distribution partners contributed as well by providing any and all assistance needed.

For some, this meant virtually living on site in New York City to help train rescue personnel on the proper use of safety equipment and to assess their need for additional equipment. For others, it meant a willingness to work long hours and step up production in MSA factories.

In the days following September 11, the scope of the rescue and recovery effort became more clear. What resulted was a comprehensive operations plan involving city, state and federal agencies, which were offered MSA support as needed. To meet their needs, MSA assigned an associate to each agency and collaborated closely with its distributors. Continuous product deliveries 24 hours a day were required to meet the ever changing needs of rescue workers.



At left is a "United We Stand" V-Gard® Cap signed by numerous rescue workers at ground zero. The hat was signed after an MSA Customer Service Associate loaned it to a member of a canine rescue team.



FEMA

Following September 11, MSA responded immediately by shipping truckloads of needed safety equipment directly to the disaster sites.

Partnership in Safety

From an occupational health perspective, September 11 was without precedent: very high levels of airborne contaminants, overwhelming numbers of professional and volunteer rescue workers, and the pressing need to prepare and train those laboring on the front lines. In this chaotic atmosphere, respirator fit testing, a process where safety professionals check workers to ensure proper respirator fit and seal, became even more critical.

To improve the level of safety at the World Trade Center site for all recovery workers, MSA created the "Partnership in Safety" program to provide respirator fit testing. Along with MSA, the Partnership in Safety was comprised of the International Union of Operating Engineers, New York City Department of Health and two safety equipment distributors — Safeware, and Olympic Glove and Safety. These partners, in close coordination with the Occupational Safety and Health Administration (OSHA), worked to ensure that workers at the site had proper protection from respiratory hazards.

The World Trade Center site held multiple stationary fit testing facilities, operated by professionals who performed the fit testing. Representatives from OSHA and the International Union of Operating Engineers also provided on-site assistance with scheduling, training and distribution of respiratory protection, along with other personal protective equipment. Almost 2,000 workers benefited from this initiative.



Negative-pressure respirator fit testing was conducted after quantitative fit testing during MSA's Partnership in Safety initiative at ground zero.



FEMA

At ground zero, MSA's challenge was to provide a continuous supply of personal protective equipment for the 24-hour-per-day recovery effort.

Financial Contributions

To help support the families of the rescue personnel lost on September 11, MSA established the MSA Charitable Foundation's September 11 Fund. Along with the Foundation's initial company-sponsored donation of \$100,000, MSA matched every contribution made by associates or retirees. Other people beyond the MSA family were invited to help as well. To date, more than \$200,000 has been contributed. Donations have since been forwarded to various special relief funds established to support the families of the fallen firefighters and police officers.

At MSA, we are proud to help protect heroes like these who put the lives of others above their own — without hesitation. We applaud them for their selfless dedication.

Our thoughts and prayers go out to all those affected by the tragedy on September 11, 2001. We honor the courageous first responders who put their lives on the line to save so many others. Their sacrifices will never be forgotten.



Callery Chemical produces large-scale, commercial quantities of many substances used in pharmaceuticals, agricultural chemicals and plastics.

Specialty Chemicals

With expertise and capabilities that are unique in its industry, Callery Chemical Company, founded in 1948, is the world's leading supplier of alkali metal strong bases and borane chemicals. Callery produces these products for a variety of applications. However, it is perhaps best known for being a trusted supplier to the world's largest pharmaceutical companies. Sales to pharmaceutical makers and their contract manufacturers comprise about three-fourths of Callery revenue, with the balance coming from agricultural chemicals, plastics and a number of specialty applications.

It might seem unusual for the leading safety equipment manufacturer to own a specialty chemical company. However, Callery's original mission was to supply a potassium-based material used in MSA's Chemox® Mask. From there, the innovative company developed markets in organic synthesis — the step-by-step construction of complex molecules like pharmaceuticals.

While 2001 was a challenging year for most specialty chemical firms, Callery maintained stable sales and reported

substantial improvement in profitability enhanced by aggressive cost control. Additionally, Callery effectively reduced inventories, improving return on assets and contributing to cash flow.

Over the past year, Callery continued its long-term capital investment program, installing new, state-of-the-art filtration capabilities. Within the past decade, the company also has constructed new diborane and potassium plants and a bulk liquid storage facility. Today, Callery is a complete, modern facility adept at safely handling the air- and water-sensitive chemicals that comprise its product line.

On the product front, Callery achieved many objectives in 2001, introducing several new chemicals including one customized to the specific needs of one industrial customer. Within four months of the customer inquiry, Callery had moved from the laboratory to multi-ton production — a significant achievement for any chemical producer. Also launched was the first in a series of products related to the Suzuki coupling reaction, an important new chemistry technology and a promising opportunity for Callery.

In addition to improving financial performance in 2001, Callery reduced both reportable and non-reportable emissions and developed a practical commercial use for what had formerly been a waste stream. As always, Callery continued to embrace the tenets of the Chemical Manufacturers Association's Responsible Care® program, using its principles to help guide decisions that could impact employees, customers, the community, and the environment.



Representative of Callery Chemical's commitment to capital investment, Building 94 was recently constructed to house the manufacturing facility for the company's borane product line.



Management's Discussion and Analysis	14
Responsibility Statements	20
Consolidated Statement of Income	21
Consolidated Balance Sheet	22
Consolidated Statement of Cash Flows	23
Consolidated Statement of Changes in Retained Earnings And Accumulated Other Comprehensive Income	24
Notes to Consolidated Financial Statements	25
Summary of Selected Financial Data	33
Principal Operations, Directors and Corporate Officers	34

2001 Financial Contents

Forward-Looking Statements

The following discussion should be read in conjunction with the consolidated financial statements contained in this Annual Report to Shareholders. Certain statements contained in this discussion and elsewhere in this report may constitute forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. These forward-looking statements involve a number of risks, uncertainties and other factors that could cause actual results to differ materially from expectations contained in such statements.

Factors that may materially affect financial condition and future results include: global economic conditions; the threat of terrorism and its potential consequences; the timely and successful introduction of new products; the availability of funding in the fire service market; the ability of third-party suppliers to provide key materials and components; market conditions affecting specialty chemical customers; liquidity; and interest and currency exchange rates.

Critical Accounting Policies and Estimates

MSA prepares its consolidated financial statements in accordance with accounting principles generally accepted in the United States of America. The preparation of these consolidated financial statements requires MSA to make estimates and judgements that affect the reported amounts of assets, liabilities, revenues and expenses, and the related disclosures. MSA bases its estimates and judgements on historical experience and various other assumptions that are believed to be reasonable under the circumstances, the results of which form the basis for making judgements about the carrying values of assets and liabilities that are not readily apparent from other sources. MSA evaluates these estimates and judgements on an ongoing basis. Actual results may differ from these estimates and judgements.

MSA believes the following critical accounting policies affect its more significant estimates and judgements used in the preparation of the consolidated financial statements. MSA records estimated reductions to sales for customer programs including volume-based incentives. If market conditions were to change, the amounts due to customers under these programs could differ from the recorded estimates. MSA maintains allowances for doubtful accounts for estimated losses resulting from the inability of its customers to make required payments. If the financial condition of MSA's customers were to deteriorate, resulting in an impairment of their ability to make payments, additional allowances could be required. MSA provides for the estimated cost of product warranties at the time that sales are recognized. While MSA has extensive product quality pro-

grams and processes, the company's warranty obligation is affected by product failure rates, material usage and service delivery costs incurred in correcting a product failure. Should actual product failure rates, material usage or service delivery costs differ from MSA's estimates, revisions to the estimated warranty liability would be required. MSA writes down its inventory for estimated obsolescence or unmarketable inventory equal to the difference between the cost of the inventory and the estimated market value based on assumptions about future demand and market conditions. If actual market conditions were less favorable than those projected by management, additional inventory write-downs could be required. MSA records a valuation allowance to reduce its deferred tax assets to the amount that is estimated to be realized. While MSA has considered future taxable income and prudent tax planning strategies in assessing the need for the valuation allowance, if MSA were to determine that it would be able to realize its deferred tax assets in excess of its net recorded amount, an adjustment to the deferred tax asset would increase net income in the period that such a determination was made. Conversely, if MSA were to determine that it would not be able to realize all or part of its net deferred tax asset in the future, an adjustment to the deferred tax asset would be charged to income in the period that such a determination was made. Actuarial assumptions have a significant impact on the determination of net periodic pension costs and credits. If actual experience differs from these assumptions, future net periodic pension costs and credits could be adversely affected.

Significant accounting policies are stated in italics in the applicable notes to the consolidated financial statements.

Results of Operations

Corporate initiatives – MSA's performance in 2001 is the result of a number of ongoing initiatives intended to improve competitive position and profitability through the development of new products, targeted acquisitions in focused product and geographic markets, and continuing cost reduction programs. These efforts are expected to continue in 2002 and beyond.

MSA's financial performance in 2001 benefited from the addition during 2000 of two key product offerings to the fire service – the Evolution series of thermal imaging cameras and the CairnsHELMETS line of firefighter head protection. Since the mid-1990s, MSA has recognized the dramatic market potential of thermal imaging camera technology in protecting lives and assisting firefighters in the line of duty. The August 2000 acquisition of CairnsHELMETS added the best known and respected supplier of firefighter head protection in North America to MSA's already strong product offerings to the fire service.

In February 2001, MSA acquired Surety Manufacturing and Testing, Ltd. of Canada, a leading provider of fall protection equipment and rescue systems to railway, construction, and utility markets. The acquisition complements the existing line of MSA Rose fall protection products and services. In addition, the Surety line of rescue systems further enhances MSA product offerings to the fire service market.

On December 20, 2001, MSA reached agreement to acquire CGF Gallet of France, the leading European manufacturer of protective helmets for the fire service, as well as head protection for the police and military. The acquisition is expected to be completed during the first half of 2002. Gallet will continue to operate from its current location near Lyon, France.

Also in Europe, the company continues to make organizational changes that are expected to improve profitability by reducing operating costs, improving manufacturing efficiencies, and providing an integrated marketing and distribution approach. Significant ongoing European reorganization efforts include more centralized customer service, product line management, and inventory planning and control. Country-specific reorganization, including workforce reductions and the sale of excess facilities, is also underway at several European locations.

Making it easy for customers to do business with us has always been a priority at MSA. Key changes in U.S. operations in recent years which demonstrate this commitment to outstanding customer service include the introduction of the MSA Pinnacle Program and the move to centralized customer service. The MSA Pinnacle Program is an innovative distributor incentive program that rewards our distributor partners for achieving specific sales goals and providing more services to customers. Our award-winning Pittsburgh based customer service center gives customers in the U.S. and Canada a knowledgeable and responsive one-stop-shopping approach to doing business with MSA. To further enhance our interface with our distributor partners, MSA added new e-business capabilities in 2001. Through our new ePartner Web site, our distributor partners in North America can now access the MSA product catalog, check product availability, view order and account status, configure assemble-to-order products and enter orders.

2001 versus 2000 – Sales for 2001 were \$542.9 million, an increase of \$42.5 million, or 8%, from \$500.4 million in 2000. Local currency sales growth of 12% was offset by negative exchange rate movements when stated in U.S. dollars.

Sales by North American operations were \$376.8 million in 2001, an increase of \$49.0 million, or 15%, from \$327.8 million in 2000. Approximately half of the sales increase was related to shipments of self-contained breathing apparatus, thermal imaging cameras and fire helmets to the fire service market. Gas mask and respirator sales increased throughout the year, but spiked late in the year in response to the September 11 disasters. Rescue and recovery efforts and heightened emphasis on domestic preparedness and homeland security have increased current demand for these products. Sales of fall protection equipment also grew in 2001, primarily due to the acquisition of Surety Manufacturing and Testing, Ltd. during the first quarter. Instrument sales were also higher during 2001, particularly in permanent instruments, reflecting market acceptance of the Ultima and other new products. Specialty chemical sales in 2001 remained at the 2000 level. Specialty chemical sales levels are highly dependent on the performance of a limited number of pharmaceutical company customers.

Sales by European operations were \$94.2 million in 2001, a decrease of \$4.9 million, or 5%, from \$99.1 million in 2000. The negative currency translation effects of a strong U.S. dollar accounted for approximately \$4.0 million of this decrease. Higher local currency sales in most European markets were offset by lower sales in Sweden and Switzerland, where distribution businesses were divested during 2001.

Sales by MSA's other international operations were \$71.7 million in 2001 compared to \$73.2 million in 2000, a decrease of \$1.5 million, or 2%. Local currency sales growth of approximately 12% was offset by unfavorable currency translation effects when stated in U.S. dollars. Substantial local currency sales growth was achieved in Brazil.

Gross profit for 2001 was \$217.2 million, an increase of \$30.1 million, or 16%, from \$187.1 million in 2000. The ratio of gross profit to sales was 40.0% in 2001 compared to 37.4% in 2000. The improved gross profit percentage accounts for approximately half of the increase in gross profit dollars. The higher gross profit percentage reflects improvements in production efficiency and inventory management in North America and Europe.

Research and development expenses in 2001 were \$18.2 million, an increase of \$1.0 million, or 6%, from \$17.2 million in 2000. These expenses relate primarily to safety and health equipment research and development activities in the U.S. and Germany.

Depreciation, selling and administrative expenses increased \$8.6 million to \$157.6 million in 2001, but decreased as a percent of sales to 29.0% in 2001 compared to 29.8% in 2000. The increase in depreciation, selling and administrative expenses occurred in North America and reflects costs associated with higher sales volumes and a full year's amortization of goodwill related to mid-2000 acquisitions. Depreciation, selling and administrative expenses at international operations were generally flat year-to-year.

Cost of products sold and selling, general and administrative expenses include net periodic pension benefit costs and credits. As described in note 12, pension credits, combined with pension costs, resulted in net pension credits of \$15.0 million in 2001 and \$14.9 million in 2000. Net pension credits in 2000 included credits of \$2.4 million related to settlement and curtailment gains in Canada and Britain. The current recognition of pension income is primarily the result of the exceptional investment performance of the U.S. pension fund over the past ten years. During that period, the investment performance of the MSA Noncontributory Pension Fund ranked among the top 5% of all U.S. pension funds. Future net pension credits can be volatile depending on the future performance of plan assets, changes in actuarial assumptions regarding such factors as the selection of discount rates and rates of return on plan assets, changes in the amortization levels of actuarial gains and losses, plan amendments affecting benefit pay-out levels, and profile changes in the participant populations being valued. Changes in any of these factors could cause net pension credits to change. To the extent net pension credits decline in the future, income would be adversely affected.

Interest expense in 2001 was \$6.1 million compared to \$4.5 million in 2000. The increase relates to a full year's interest expense on additional borrowings made during 2000 to finance acquisitions and common share repurchases by the company.

Currency exchange losses of \$1.2 million were incurred in 2001 compared to a gain of \$444,000 in 2000. The unfavorable swing was primarily related to the strengthening of the U.S. dollar against the Canadian dollar. The most significant gains from currency valuation changes in 2000 occurred in Mexico.

Restructuring charges in 2001 were \$2.3 million compared to \$2.4 million in 2000. The charges in 2001 relate primarily to a plant closing in the U.S. and severance costs associated with workforce reductions in Europe. The 2000 charges were principally for severance costs in Britain, Germany and Canada.

Other income, for which further information is included in note 4, was \$2.8 million in 2001 compared to \$2.5 million in 2000.

The effective income tax rate, for which further information is included in note 8, was 40.2% in 2001 and 31.8% in 2000. The effective rate in 2001 was higher than the U.S. statutory income tax rate primarily due to the recognition of a valuation allowance on deferred tax assets related to foreign tax credit carry-forwards in the U.S. and improved earnings in high tax rate countries. The lower rate in 2000 was primarily due to operating losses in Germany and adjustments to prior year foreign sales corporation tax benefits in the U.S.

Net income for 2001 was \$31.6 million, an increase of \$8.4 million, or 36%, over 2000 net income of \$23.2 million. Basic earnings per share of common stock improved to \$2.65 in 2001 compared to \$1.89 in 2000.

2000 versus 1999 – Sales for 2000 were \$500.4 million, an increase of \$2.5 million, or less than 1%, from \$497.9 million in 1999. Local currency sales growth of 5% was offset by negative exchange rate movements when stated in U.S. dollars.

Sales by North American operations were \$327.8 million in 2000, an increase of \$12.7 million, or 4%, from \$315.1 million in 1999. Higher sales in 2000 reflect new product offerings and strong shipments of core safety products to the fire service, industrial and construction markets. Shipments of self-contained breathing apparatus for fire-fighters, gas masks for defense preparedness, and helmets for industrial and construction worker head protection all improved significantly during the year. Sales were also strengthened by the third quarter 2000 introductions of the Evolution series of thermal imaging cameras and the CairnsHELMETS line of firefighter head protection. Higher portable instrument sales in 2000 reflect the late-1999 introduction of the improved Passport FiveStar Alarm multigas detector. Specialty chemical sales in 2000 were 8% lower than in the prior year. Specialty chemical sales levels are highly dependent on the performance of a limited number of pharmaceutical company customers.

Sales by European operations were \$99.1 million in 2000, a decrease of \$14.3 million, or 13%, from \$113.4 million in 1999. Local currency sales in Europe were flat year-to-year. Sales growth in Eastern European markets was offset by mixed, but somewhat lower, sales in Western Europe.

Sales by MSA's other international operations were \$73.2 million in 2000 compared to \$68.0 million in 1999, an increase of \$5.2 million, or 8%. A 14% improvement in local currency sales was partially offset by unfavorable currency translation effects when stated in U.S. dollars. Sales growth in South America was particularly strong on improved economic conditions in the region. Notable growth also occurred in Africa and China reflecting expanding operations in those areas.

Gross profit for 2000 was \$187.1 million, an increase of \$7.4 million, or 4%, from \$179.7 million in 1999. An increase in the ratio of gross profit to sales to 37.4% in 2000 from 36.1% in 1999 is the primary reason for higher gross profit in 2000. Higher sales account for approximately \$1.0 million of the gross profit improvement.

Research and development expenses were largely unchanged in 2000 at \$17.2 million, compared to \$17.1 million in 1999. These expenses relate primarily to safety and health equipment research and development activities in the U.S. and Germany.

Depreciation, selling and administrative expenses decreased \$3.8 million to \$149.0 million in 2000, and decreased as a percent of sales to 29.8% in 2000 compared to 30.7% in 1999. The decrease is the result of cost saving restructuring initiatives in North America and Europe. Depreciation, selling and administrative expenses at other international operations were slightly higher than in 1999.

Cost of products sold and selling, general and administrative expenses include net periodic pension benefit costs and credits. As described in note 12, pension credits, combined with pension costs, resulted in net pension credits of \$14.9 million in 2000 and \$10.2 million in 1999. Net pension credits in 2000 included credit of \$2.4 million for settlement and curtailment gains in Canada and Britain. In 1999 net pension credits included a net gain of \$2.8 million resulting from the termination benefit costs and settlement gains associated with a voluntary retirement incentive program in the U.S.

Interest expense in 2000 was \$4.5 million compared to \$4.3 million in 1999.

Currency exchange gains were \$444,000 in 2000 compared to \$694,000 in 1999. The most significant gains from currency valuation changes in 2000 occurred in North America.

Restructuring charges in 2000 were \$2.4 million compared to \$4.0 million in 1999. The charges in 2000 relate primarily to severance and early retirement costs associated with workforce reductions in Britain, Germany and Canada. The 1999 charges were principally for severance costs in Germany.

Other income, for which further information is included in note 4, was \$2.5 million in 2000 compared to \$3.8 million in 1999. Other income in 2000 included a discount of \$2.7 million on the sale of trade accounts receivable under the securitization agreement, which is more fully-described in note 15. Because the accounts receivable securitization arrangement commenced in November 1999, the comparable loss in the prior year was only \$300,000.

The effective income tax rate, for which further information is included in note 8, was 31.8% in 2000 and 29.6% in 1999. The effective rate in both years was lower than the U.S. statutory income tax rate primarily due to international operating losses in Germany and adjustments to prior years' taxes in the U.S., mainly due to foreign sales corporation tax benefits.

As further described in note 16, during 1999 the company changed the reporting periods of a number of international affiliates, including Germany which is the company's largest international affiliate. The effect of this change, which represents the after-tax results of these affiliates for December 1999, is reported as a change in accounting principle. The December 1999 net loss included severance costs related to ongoing workforce reductions in Germany.

Net income for 2000 was \$23.2 million, an increase of \$8.1 million, or 54%, over 1999 net income of \$15.1 million. Basic earnings per share of common stock improved to \$1.89 in 2000 compared to \$1.16 in 1999.

Liquidity and Financial Condition

Cash and cash equivalents increased \$451,000 during 2001, compared to an increase of \$9.4 million in 2000. The company's principal source of financing capital expenditures and internal growth is cash flow from operations. Operations provided cash of \$30.8 million in 2001 compared to providing \$51.8 million in 2000. Lower operating cash flow in 2001 was due to changes in operating assets and liabilities. In 2001, operating cash was used to finance increases in receivables and inventories of \$14.2 and \$6.1 million, respectively, and a decrease in accounts payable and accrued liabilities of \$5.4 million. Cash provided by operations in 2000 was \$12.4 million higher than in 1999. Cash flow in 2000 benefited from reductions in receivables and inventories.

Investing activities used cash of \$22.4 million in 2001 compared to \$45.7 million in 2000. In 2001, cash was used for the acquisition of Surety Manufacturing and Testing, Ltd. In 2000, significant cash was used for the acquisitions of CairnsHELMETS and ISI Group, Inc. In 1999, acquisitions and other investing included \$2.6 million related to the acquisition of Campbell Gardwel in South Africa and \$2.7 million for development costs at the Cranberry Woods office park. Capital expenditures of \$22.3 million in 2001 and \$19.4 million in 2000 were primarily related to purchases of new or replacement tooling and production equipment. Capital expenditures of \$26.2 million in 1999 included increased expenditures for information systems and manufacturing facility improvements associated with U.S. restructuring activities.

Financing activities used cash of \$6.3 million in 2001 compared to providing \$4.1 million in 2000. In December 2001, cash was used to pay off \$5.0 million of private placement debt upon maturity. During 2000 the company issued \$40.0 million of private placement debt to finance acquisitions and common stock repurchases. The additional use of cash for financing activities in 1999 was related to reductions in short-term borrowings during the year. Dividends paid on common stock during 2001 (the 84th consecutive year of dividend payment) were 54 cents per share. Dividends paid per share in 2000 and 1999 were 47 cents and 44 cents, respectively. During 2000, the company repurchased 2.2 million shares of common stock, including 2.1 million from the family of a co-founder, for \$54.9 million. Approximately 1.1 million shares of common stock held in treasury were sold to the MSA pension plan in 2000 for \$27.0 million. As of December 31, 2001, an additional 64,774 shares may be repurchased under current authorizations.

Short term debt increased \$879,000 during 2001 to \$2.2 million. The average amount of short term debt outstanding during 2001 and 2000 was \$4.2 million and \$5.6 million, respectively. Credit available at year-end with financial institutions was the U.S. dollar equivalent of \$20.1 million, of which \$17.9 million was unused.

Long-term debt, including the current portion, decreased \$5.5 million to \$71.7 million, or 22.0% of total capital. Total capital is defined as long-term debt plus the current portion of long-term debt and shareholders' equity. During 2000, long-term debt increased \$40.2 million to \$77.1 million. The increase reflected the issuance of \$40.0 million in fixed rate senior notes payable in installments through 2012. Proceeds of the notes were used to finance acquisitions and common stock repurchases.

Outstanding indebtedness at December 31, 2001 and 2000 was as follows:

December 31	2001	2000
Bank lines of credit	\$ 2,167	\$ 1,288
Industrial development debt	10,750	10,750
Senior notes	60,000	65,000
Other, including capital leases	2,401	1,380
	<u>75,318</u>	<u>78,418</u>
Current portion	(6,940)	(6,612)
	<u>68,378</u>	<u>71,806</u>

Trade receivables increased \$4.9 million to \$50.7 million at December 31, 2001. Trade receivables expressed in number of days sales outstanding was 34 days at December 31, 2001, compared to 33 days at the end of 2000. Other receivables were \$38.3 million at December 31, 2001 and \$30.5 million at December 31, 2000, representing the company's retained interest in securitized receivables. Inventories increased \$5.2 million to \$77.9 million at December 31, 2001. Inventory measured against sales turned 7.0 times in 2001 and 6.9 times in 2000. The working capital ratio was 2.6 to 1 at the end of 2001 and 2.3 to 1 at the end of 2000.

The company's financial position remains strong and is expected to provide adequate capital resources for operations, capital expansion and dividends to shareholders.

Accounts Receivable Securitization

As described in note 15, the company sells eligible trade accounts receivable to Mine Safety Funding Corporation (MSF). Under accounting principles generally accepted in the United States of America, MSF is not consolidated with MSA because, as a distinct legal entity, the receivables held by MSF are isolated and beyond the reach of MSA and its creditors. This arrangement permits MSF to borrow at advantageous interest rates using its portfolio of trade receivables as security. As a result of the securitization agreement, approximately \$25 million of accounts receivable and short-term debt are not included in the company's December 31, 2001 balance sheet. At December 31, 2000, approximately \$21 million of accounts receivable and short-term debt are not included in the company's balance sheet under this arrangement.

Cumulative Translation Adjustments

The year-end position of the U.S. dollar relative to international currencies resulted in translation losses of \$4.9 million being charged to the cumulative translation adjustments shareholders' equity account in 2001, compared to losses of \$5.9 million in 2000 and \$5.1 million in 1999. Translation losses in 2001 occurred primarily in South Africa, Brazil, Chile and most European countries. Translation losses in 2000 occurred primarily in Australia, South Africa, Britain, Canada, and Germany. The 1999 losses occurred in Brazil, Germany and Italy.

Financial Instrument Market Risk

Market risk represents the risk of adverse changes in the value of a financial instrument caused by changes in currency exchange rates, interest rates and equity prices. The company is exposed to market risks related to currency exchange rates and interest rates.

Currency exchange rate sensitivity – By the very nature of its global operations, the company's cash flow and earnings are subject to fluctuations due to exchange rate changes. However, because the company operates in a number of locations around the world, currency exchange risk is well diversified. Short-term debt of international affiliates is generally payable in local currencies, which is in keeping with the company's policy of reducing currency exchange exposures by offsetting local currency assets with local currency debt.

Interest rate sensitivity – The company is exposed to changes in interest rates primarily as a result of borrowing and investing activities used to maintain liquidity and fund business operations. Because of the relatively short maturities of temporary investments and the variable rate nature of industrial development debt, these financial instruments were reported at carrying values which approximate fair value at December 31, 2001. The incremental increase in the fair value of fixed rate long term debt resulting from a hypothetical 10% decrease in interest rates would be approximately \$1.3 million. However, the company's sensitivity to interest rate declines and the corresponding increase in the fair value of its debt portfolio would unfavorably affect earnings and cash flows only to the extent that the company elected to repurchase or retire all or a portion of its fixed rate debt portfolio at prices above carrying values.

Recently Issued Accounting Standards

FAS No. 141, Business Combinations, effective July 1, 2001, requires the purchase method of accounting for all business combinations initiated after June 30, 2001 and establishes specific criteria for the recognition of intangible assets separate from goodwill. There have been no material business combinations since June 30, 2001. The company does not expect the requirements of this statement to have a significant effect on its results or financial position.

FAS No. 142, Goodwill and Other Intangible Assets, effective January 1, 2002, eliminates the periodic amortization of goodwill and instead requires an impairment review of goodwill balances at least annually. Goodwill amortization expense in 2001 was approximately \$2.2 million. At December 31, 2001, MSA had goodwill of \$33.7 million. Pursuant to FAS No. 142, MSA will test its goodwill for impairment upon adoption and, if impairment is indicated, record such impairment as a cumulative effect of accounting change. MSA is currently evaluating the effect that adoption may have on its results and financial position.

FAS No. 143, Accounting for Asset Retirement Obligations, effective January 1, 2003, addresses accounting and reporting for legal obligations associated with the retirement of long-lived assets that result from the acquisition, construction or normal operation of such assets. The company does not expect that the adoption of this statement will have a significant effect on its results or financial position.

FAS No. 144, Accounting for the Impairment or Disposal of Long-Lived Assets, effective January 1, 2002, addresses accounting and reporting for the impairment or disposal of long-lived assets. The company does not expect that the adoption of this statement will have a significant effect on its results or financial position.

Common Stock

At December 31, 2001, there were 12,100,727 shares of common stock outstanding. There were approximately 1,000 identifiable common stockholders on November 23, 2001, a recent date for dividends. Common stock price and volume information is included on the American Stock Exchange under the symbol MSA. The quarterly high and low price quotations and cash dividend information for common shares, adjusted to reflect the three-for-one split in May 2000, follow:

Quarter	2001		2000	
	High	Low	High	Low
First	\$25.65	\$22.00	\$21.17	\$18.83
Second	34.25	25.45	26.50	21.38
Third	47.92	30.35	24.25	18.63
Fourth	51.90	32.10	25.88	19.13

Quarter	Dividend Per Share	Record Date	Payment Date
2001			
First	\$.12	Feb. 23, 2001	Mar. 10, 2001
Second	.14	May 14, 2001	Jun. 8, 2001
Third	.14	Aug. 24, 2001	Sep. 10, 2001
Fourth	.14	Nov. 23, 2001	Dec. 10, 2001
Total	.54		

2000			
First	\$.11	Feb. 25, 2000	Mar. 10, 2000
Second	.12	May 26, 2000	Jun. 10, 2000
Third	.12	Aug. 25, 2000	Sep. 10, 2000
Fourth	.12	Nov. 17, 2000	Dec. 10, 2000
Total	.47		

The company's stock transfer agent is Wells Fargo Shareowner Services, 161 North Concord Exchange, P. O. Box 738, South St. Paul, MN 55075-0738.

Responsibility for Financial Statements

The management of Mine Safety Appliances Company prepared the accompanying financial statements and is responsible for their integrity and objectivity. These statements were prepared in conformity with accounting principles generally accepted in the United States of America. The financial statements include amounts that are based on management's best estimates and judgements. The other information in this annual report is consistent with the financial statements.

The company maintains a system of internal controls, including accounting controls, and a program of internal auditing. The system of controls provides for appropriate procedures that are consistent with high standards of accounting and administration. Management believes that the company's system of internal accounting controls provides reasonable assurance that assets are safeguarded against losses from unauthorized use or disposition and that the financial records are reliable for use in preparing financial statements.

Management recognizes its responsibility for fostering a strong ethical climate so that the company's affairs are conducted according to the highest standards of personal and corporate conduct. This responsibility is characterized and reflected in a broad business ethics policy that addresses, among other things, conduct of business activities within the laws of the United States and other countries in which the company operates and potential conflicts of interests of its associates.

The Board of Directors, through its Audit Committee, assumes an oversight role in the preparation of the financial statements. The Audit Committee meets at least twice a year with the company's independent accountants and internal auditors to discuss the scope of their work and the results of their examinations.



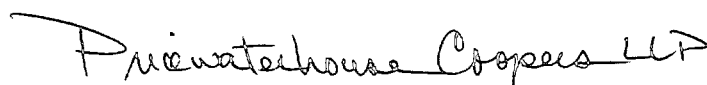
Dennis L. Zeitler
Vice President
Chief Financial Officer
and Treasurer

Report of Independent Accountants

To the Shareholders and Board of Directors of Mine Safety Appliances Company:

In our opinion, the accompanying consolidated balance sheet and the related consolidated statements of income, changes in retained earnings and accumulated other comprehensive income, and cash flows present fairly, in all material respects, the financial position of Mine Safety Appliances Company and its subsidiaries (the "Company") at December 31, 2001 and 2000, and the results of their operations and their cash flows for each of the three years in the period ended December 31, 2001 in conformity with accounting principles generally accepted in the United States of America. These financial statements are the responsibility of the Company's management; our responsibility is to express an opinion on these financial statements based on our audits. We conducted our audits of these statements in accordance with auditing standards generally accepted in the United States of America, which require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

As discussed in Note 16 to the financial statements, the Company changed the reporting period for certain subsidiaries in 1999.



PricewaterhouseCoopers LLP
February 20, 2002

Consolidated Statement of Income

(In thousands, except per share amounts)

Year Ended December 31	2001	2000	1999
Net sales	\$542,856	\$500,367	\$497,908
Other income	2,810	2,466	3,824
	<u>545,666</u>	<u>502,833</u>	<u>501,732</u>
Costs and expenses			
Cost of products sold	325,662	313,279	318,174
Selling, general and administrative	131,102	124,456	129,478
Depreciation and amortization	26,471	24,557	23,356
Interest	6,061	4,502	4,273
Currency exchange losses/(gains)	1,197	(444)	(694)
Facilities consolidation and restructuring charges	2,287	2,433	3,960
	<u>492,780</u>	<u>468,783</u>	<u>478,547</u>
Income before income taxes	52,886	34,050	23,185
Provision for income taxes	21,255	10,811	6,859
Income before change in reporting period	31,631	23,239	16,326
Change in reporting period, net of tax			(1,192)
Net income	<u>\$ 31,631</u>	<u>\$ 23,239</u>	<u>\$ 15,134</u>
Basic earnings per common share:			
Income before change in reporting period	\$ 2.65	\$ 1.89	\$ 1.25
Change in reporting period			(.09)
Net income	<u>\$ 2.65</u>	<u>\$ 1.89</u>	<u>\$ 1.16</u>
Diluted earnings per common share:			
Income before change in reporting period	\$ 2.61	\$ 1.88	\$ 1.25
Change in reporting period			(.09)
Net income	<u>\$ 2.61</u>	<u>\$ 1.88</u>	<u>\$ 1.16</u>

Consolidated Balance Sheet

(In thousands, except share amounts)

December 31

Assets

Current Assets

Cash	\$ 22,842	\$ 19,408
Temporary investments, at cost which approximates market	4,150	7,133
Trade receivables, less allowance for doubtful accounts of \$2,956 and \$2,363	50,704	45,835
Other receivables	38,325	30,498
Inventories	77,874	72,681
Deferred tax assets	13,633	14,167
Prepaid expenses and other current assets	10,158	11,431
Total current assets	217,686	201,153

Property

Land	5,552	5,411
Buildings	102,555	106,010
Machinery and equipment	272,700	262,372
Construction in progress	8,289	9,948
Total	389,096	383,741
Less accumulated depreciation	(236,128)	(224,155)
Net property	152,968	159,586

Other Assets

Prepaid pension cost	92,437	78,157
Deferred tax assets	12,694	10,315
Goodwill, less accumulated amortization of \$6,438 and \$4,227	33,722	30,369
Other noncurrent assets	11,191	10,103
Total	\$520,698	\$489,683

Liabilities

Current Liabilities

Notes payable and current portion of long-term debt	\$ 6,484	\$ 6,616
Accounts payable	24,751	32,387
Employees' compensation	14,368	13,202
Insurance	9,267	8,476
Taxes on income	4,812	2,263
Other current liabilities	22,818	24,034
Total current liabilities	82,500	86,978

Long-Term Debt

.....	67,381	71,806
-------	--------	--------

Other Liabilities

Pensions and other employee benefits	55,428	54,626
Deferred tax liabilities	56,053	47,151
Other noncurrent liabilities	5,832	2,657
Total other liabilities	117,313	104,434

Shareholders' Equity

Preferred stock, 4½% cumulative, \$50 par value (callable at \$52.50)	3,569	3,569
Common stock, no par value (shares outstanding: 2001— 12,100,727 2000—11,827,623)	25,386	18,841
Stock compensation trust	(22,179)	(25,683)
Treasury shares, at cost	(133,981)	(130,674)
Deferred stock compensation	(652)	(1,145)
Accumulated other comprehensive income	(26,216)	(20,869)
Earnings retained in the business	407,577	382,426
Total shareholders' equity	253,504	226,465
Total	\$520,698	\$489,683

Consolidated Statement of Cash Flows

(In thousands)

Year Ended December 31

	2001	2000	1999
Operating Activities			
Net income	\$31,631	\$23,239	\$15,134
Depreciation and amortization	26,471	24,557	23,728
Pensions	(14,962)	(14,900)	(10,175)
Net (gain)/loss on sale of investments and assets	(1,764)	(2,136)	65
Deferred income taxes	9,518	3,906	3,269
Receivables and other receivables	(14,216)	6,007	15,013
Inventories	(6,146)	11,927	5,272
Accounts payable and accrued liabilities	(5,396)	3,255	(1,892)
Other assets and liabilities	4,654	438	(4,592)
Other—including currency exchange adjustments	1,046	(4,520)	(6,400)
Cash Flow From Operating Activities	30,836	51,773	39,422
Investing Activities			
Property additions	(22,347)	(19,360)	(26,247)
Property disposals	6,685	3,428	1,567
Acquisitions, net of cash acquired, and other investing	(6,765)	(29,796)	(4,892)
Cash Flow From Investing Activities	(22,427)	(45,728)	(29,572)
Financing Activities			
Additions to long-term debt	12	40,720	25,336
Reductions of long-term debt	(5,259)	(640)	(588)
Changes in notes payable and short-term debt	1,150	(2,276)	(28,767)
Cash dividends	(6,480)	(5,881)	(5,928)
Company stock purchases	(3,227)	(54,948)	(5,660)
Company stock sales	7,477	27,088	222
Cash Flow From Financing Activities	(6,327)	4,063	(15,385)
Effect of exchange rate changes on cash	(1,631)	(675)	(1,377)
Increase/(decrease) in cash and cash equivalents	451	9,433	(6,912)
Beginning cash and cash equivalents	26,541	17,108	24,020
Ending cash and cash equivalents	\$26,992	\$26,541	\$17,108
Supplemental cash flow information:			
Interest payments	\$ 6,566	\$ 3,419	\$ 4,299
Income tax payments	9,765	6,789	3,648
Noncash investing activity:			
Investment sold for other current assets		1,334	

See notes to consolidated financial statements.

2001 MSA Annual Report

Consolidated Statement of Changes in Retained Earnings And Accumulated Other Comprehensive Income

(In thousands)

	Retained Earnings	Accumulated Other Comprehensive Income	Comprehensive Income
Balances January 1, 1999	\$355,862	\$(10,240)	
Net income	15,134		\$15,134
Cumulative translation adjustments		(5,141)	(5,141)
Minimum pension liability adjustments (a)		550	550
Comprehensive income			<u>\$10,543</u>
Common dividends	(5,878)		
Preferred dividends	(50)		
Balances December 31, 1999	365,068	(14,831)	
Net income	23,239		\$23,239
Cumulative translation adjustments		(5,921)	(5,921)
Minimum pension liability adjustments (a)		(117)	(117)
Comprehensive income			<u>\$17,201</u>
Common dividends	(5,832)		
Preferred dividends	(49)		
Balances December 31, 2000	382,426	(20,869)	
Net income	31,631		\$31,631
Cumulative translation adjustments		(4,934)	(4,934)
Minimum pension liability adjustments (a)		(413)	(413)
Comprehensive income			<u>\$26,284</u>
Common dividends	(6,432)		
Preferred dividends	(48)		
Balances December 31, 2001	<u>\$407,577</u>	<u>\$(26,216)</u>	

(a) - Charges in 2001 and 2000 to minimum pension liability adjustments are net of tax benefit of \$275,000 and \$78,000, respectively.
The credit in 1999 is net of tax expense of \$367,000.

Components of accumulated other comprehensive income are as follows:

	(In thousands)		
	2001	2000	1999
Cumulative translation adjustments	\$(25,365)	\$(20,431)	\$(14,510)
Minimum pension liability adjustments	(851)	(438)	(321)
Accumulated other comprehensive income	<u>\$(26,216)</u>	<u>\$(20,869)</u>	<u>\$(14,831)</u>

Note 1—Basis of Presentation

Certain prior year balances have been reclassified to conform with the current year presentation.

Significant accounting policies are stated in *italics* in the applicable notes to consolidated financial statements.

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

All significant majority-owned companies, except Mine Safety Funding Corporation, are included in the consolidated financial statements. Investments in which the company has an equity interest of 20% to 50% are carried at equity in net assets. Intercompany transactions are eliminated in consolidation.

Revenue from the sale of products is recognized when both risk of loss and title have transferred to the customer.

Property is stated at cost. Depreciation is based on estimated useful lives using accelerated and straight-line methods. Maintenance and repairs are charged to expense. Renewals and betterments which substantially extend the useful life of property are capitalized. Profits or losses resulting from dispositions are included in income.

Intangible assets, including goodwill and patents, are amortized on a straight line basis over periods not exceeding 35 years.

The financial statements of companies for which the United States dollar is determined to be the functional currency are translated using current and historic exchange rates; adjustments are included in income for the current period. The financial statements of all other companies are translated from their functional currency into United States dollars using current exchange rates; translation adjustments are not included in income but are accumulated in a separate equity account. Transaction gains and losses are recognized in income for the current period.

Cash and cash equivalents in the Consolidated Statement of Cash Flows includes temporary investments that are readily marketable and have minimal risk of change in value. Certain securities have maturities in excess of ninety days; but, as part of the company's cash management program, maturities are scheduled based on expected cash needs for the ensuing twelve months.

Comprehensive income, determined in accordance with Statement of Financial Accounting Standards No. 130, includes net income and changes in other comprehensive income items which are reported in shareholders' equity. Other comprehensive income is reported net of related income tax expense or benefit.

Note 2—Restructuring

Restructuring charges of \$2,287,000 relate to a plant closing in the U.S. and workforce reductions in Europe in 2001, \$2,433,000 in 2000 and \$3,960,000 in 1999 relate to workforce reductions, primarily in Britain, Germany and Canada in 2000 and in Germany in 1999.

Note 3—Research and Development Expense

Research and development costs, charged to cost of products sold as incurred, were \$18,195,000 in 2001, \$17,241,000 in 2000, and \$17,097,000 in 1999.

Note 4—Other Income

	(In thousands)		
	2001	2000	1999
Interest	\$1,183	\$1,243	\$ 914
Rent	739	957	1,310
Dividends	625	555	
Dispositions of assets	(136)	(528)	1,796
Other, net	399	239	(196)
Total	2,810	2,466	3,824

Note 5—Inventories

Most U.S. inventories are valued on the last-in, first-out (LIFO) cost method. Other inventories are valued at the lower of cost, using average or current standard costs which approximate actual costs on a first-in, first-out (FIFO) basis, or market, determined by replacement cost or net realizable value.

Reductions in certain inventory quantities during 2000 and 1999 resulted in liquidations of LIFO inventory quantities carried at lower costs prevailing in prior years. The effect of these liquidations reduced cost of sales by \$1,920,000 in 2000, and \$216,000 in 1999, and increased net income by \$1,171,000 (\$.10 per share), and \$132,000 (\$.01 per share), respectively.

	(In thousands)	
	2001	2000
Finished products	\$30,375	\$30,743
Work in process	12,099	10,451
Raw materials and supplies	35,400	31,487
Total inventories	77,874	72,681
Excess of FIFO costs over LIFO costs	38,059	42,711

Inventories stated on the LIFO basis represent 52%, 45%, and 48% of the total inventories at December 31, 2001, 2000, and 1999, respectively.

Note 6—Long-Term Debt

	(In thousands)	
	2001	2000
U.S.		
Industrial development debt issues payable through 2022, 3.1%	\$10,750	\$10,750
Series A Senior Notes payable through 2001, 7.3%		5,000
Series B Senior Notes payable through 2006, 7.69%	20,000	20,000
Senior Notes payable through 2012, 8.39%	40,000	40,000
Other, 18%	38	61
International		
Various notes payable through 2003, 4.5% to 7% (\$830 and \$723 collateralized by pledge of assets located abroad)	868	1,319
Total	71,656	77,130
Amounts due within one year	4,275	5,324
Long-term debt	67,381	71,806

Approximate maturities of these obligations over the next five years are \$4,275,000 in 2002, \$4,028,000 in 2003, \$4,000,000 in 2004, \$4,000,000 in 2005, and \$8,000,000 in 2006. Some debt agreements require the company to maintain certain financial ratios and minimum net worth and contain restrictions on the total amount of debt.

Note 7—Segment Information

Segment information is reported in accordance with Statement of Financial Accounting Standards No. 131, which designates the internal financial information that is used by management for making operating decisions and assessing performance as the source for identifying the company's operating segments.

The company is organized into three geographic operating segments: North America, Europe, and Other International. The company is engaged in the manufacture and sale of safety and health equipment, including respiratory protective equipment, head protection, eye and face protection, hearing protectors, safety clothing, industrial emergency care products, mining safety equipment, thermal imaging cameras and monitoring instruments. In addition, the company manufactures and sells specialty chemicals, including boron-based chemicals.

Reportable segment information is presented in the following table:

	(In thousands)				
	North America	Europe	Other International	Reconciling items	Consolidated totals
2001					
Sales to external customers	\$376,766	\$ 94,187	\$ 71,735	\$ 168	\$542,856
Intercompany sales	20,074	21,668	2,124	(43,866)	
Net income	28,355	130	3,619	(473)	31,631
Total assets	399,912	96,372	48,816	(24,402)	520,698
Interest income	513	146	408	116	1,183
Interest expense	5,556	156	349		6,061
Noncash items:					
Depreciation and amortization	21,595	3,680	1,170	26	26,471
Pension income (expense)	17,885	(2,783)	(140)		14,962
Equity in earnings of affiliates			40		40
Income tax provision	18,596	900	1,732	27	21,255
Investments in affiliates	1,374		135		1,509
Property additions	15,767	4,916	1,621	43	22,347
Fixed assets	128,768	18,118	6,033	49	152,968
2000					
Sales to external customers	327,849	99,119	73,199	200	500,367
Intercompany sales	25,573	16,389	1,453	(43,415)	
Net income	21,876	(2,225)	3,624	(36)	23,239
Total assets	365,035	93,955	50,296	(19,603)	489,683
Interest income	604	285	329	25	1,243
Interest expense	3,791	216	495		4,502
Noncash items:					
Depreciation and amortization	19,744	3,374	1,314	125	24,557
Pension income (expense)	16,640	(1,552)	(188)		14,900
Equity in earnings of affiliates			25		25
Income tax provision (benefit)	11,001	(2,041)	1,776	75	10,811
Investments in affiliates	1,358		95		1,453
Property additions	14,031	3,630	1,694	5	19,360
Fixed assets	132,597	20,681	6,290	18	159,586
1999					
Sales to external customers	315,087	113,365	68,032	1,424	497,908
Intercompany sales	34,128	17,637	1,691	(53,456)	
Net income	14,991	(1,724)	3,498	(1,631)	15,134
Total assets	330,884	92,531	49,836	(21,510)	451,741
Interest income	298	406	190	20	914
Interest expense	3,267	285	723	(2)	4,273
Noncash items:					
Depreciation and amortization	17,451	4,386	1,392	127	23,356
Pension income (expense)	13,002	(3,149)	322		10,175
Equity in earnings of affiliates			45		45
Income tax provision (benefit)	7,502	(2,123)	1,657	(177)	6,859
Investments in affiliates	1,358		70		1,428
Property additions	20,028	4,662	1,547	10	26,247
Fixed assets	135,146	21,679	6,660	24	163,509

Sales by product line:

	(In thousands)		
	2001	2000	1999
Safety and health equipment	\$510,083	\$468,032	\$462,608
Specialty chemicals	32,773	32,335	35,300
	542,856	500,367	497,908

Reconciling items consist primarily of intercompany eliminations and items reported at the corporate level.

Sales are attributed to segments based on the location of the selling company. Sales in Germany were \$46,865,000 in 2001, \$47,471,000 in 2000, and \$56,017,000 in 1999.

Note 8—Income Taxes

Income taxes are accounted for in accordance with Statement of Financial Accounting Standards No. 109. Deferred tax balances are stated at enacted tax rates expected to be in effect when taxes are actually paid or deductions are taken. No provision is made for undistributed earnings of international affiliates since little or no tax would result under applicable existing statutes or because management intends that these earnings be permanently reinvested for working capital and capital expenditure requirements.

The U.S. and non-U.S. components of income before income taxes and provisions for income taxes are summarized as follows:

	(In thousands)		
	2001	2000	1999
Income Before Income Taxes			
U.S. income	\$43,472	\$32,053	\$23,790
Non-U.S. income	6,226	6,080	3,225
Currency translation (losses)	(776)		(95)
Eliminations	3,964	(4,083)	(3,735)
Income Before Income Taxes	52,886	34,050	23,185
Provision For Income Taxes			
Current			
Federal	8,039	2,713	(834)
State	978	804	367
Non-U.S.	2,720	3,388	3,281
Total current provision	11,737	6,905	2,814
Deferred			
Federal	8,590	5,540	5,779
State	1,778	1,221	921
Non-U.S.	(850)	(2,855)	(2,655)
Total deferred provision	9,518	3,906	4,045
Provision for Income Taxes	21,255	10,811	6,859

The following is a reconciliation of income taxes calculated at the U.S. Federal income tax rate of 35% to the provision for income taxes:

Provision for income taxes at statutory rate	18,510	11,918	8,115
State income taxes, net of federal benefit	1,897	1,316	837
Foreign tax credit valuation allowance	1,000		
Adjustment of prior years' income taxes	16	(782)	(954)
Non-U.S. taxes	108	(1,323)	(774)
Other—net	(276)	(318)	(365)
Provision for income taxes	21,255	10,811	6,859

The components of deferred taxes are as follows:

	(In thousands)	
	2001	2000
Deferred tax assets		
Postretirement benefits	\$ 5,701	\$ 5,946
Inventory reserves and unrealized profits	3,463	4,745
Vacation allowances	2,441	2,050
Loss and credit carryforwards	13,472	12,590
Liability insurance	1,931	2,036
Accrued liabilities	1,214	2,274
Allowance for doubtful accounts	502	483
Trademarks and license fees	692	642
Warranties	997	871
Other	(5)	397
Total deferred tax assets	30,408	32,034
Valuation allowance	(1,000)	
Net deferred tax assets	29,408	32,034
Deferred tax liabilities		
Depreciation	(24,234)	(26,296)
Pension	(32,511)	(25,582)
Basis of investments	(2,389)	(2,825)
Total deferred tax liabilities	(59,134)	(54,703)
Net deferred taxes	(29,726)	(22,669)

The valuation allowance recorded in 2001 reduces deferred tax assets related to foreign tax credit carryforwards because the character of future taxable income may not allow realization within the prescribed carryforward period.

The company has tax credit carryforwards of \$2,546,000 that expire between 2003 and 2005. The company also has net operating loss carryforwards of \$9,434,000 with no expiration date, primarily in Germany, \$608,000 that expire in 2008 and \$884,000 that expire in 2019.

Undistributed earnings of international companies for which U.S. income taxes have not been provided were \$82,786,000 at December 31, 2001.

Note 9—Capital Stock

- Common stock, no par value - 60,000,000 shares authorized
- Second cumulative preferred voting stock, \$10 par value - 1,000,000 shares authorized; none issued
- 4 1/2% cumulative preferred stock, \$50 par value - 100,000 shares authorized; 71,373 shares issued and 50,313 shares (\$1,629,000) held in treasury (600 shares, \$21,000, purchased for treasury in 2001; no activity in 2000; 400 shares, \$13,000, purchased for treasury in 1999).

Common stock activity is summarized as follows:

	Shares			Dollars (In thousands)		
	Shares Issued	Stock Compensation Trust	Shares in Treasury	Shares Issued	Stock Compensation Trust	Treasury Cost
Balances January 1, 1999	6,778,599	(571,690)	(1,828,035)	\$ 12,564	\$ (26,869)	\$ (89,494)
Stock options exercised		4,060		32	190	
Treasury shares purchased			(91,263)			(5,660)
Balances December 31, 1999	6,778,599	(567,630)	(1,919,298)	12,596	(26,679)	(95,154)
Restricted stock awards (pre-split)		19,760		318	929	
Treasury shares purchased (pre-split)			(74,616)			(4,994)
Three-for-one stock split	13,557,198	(1,095,740)	(3,987,828)			
Restricted stock awards forfeited (post-split)			(2,790)			(58)
Stock options exercised (post-split)		4,290		21	67	
Treasury shares purchased (post-split)			(2,009,322)			(49,954)
Treasury shares issued (post-split)			1,125,000	5,906		21,094
Balances December 31, 2000	20,335,797	(1,639,320)	(6,868,854)	18,841	(25,683)	(129,066)
Restricted stock awards		860		12	13	
Restricted stock awards forfeited			(3,900)			(80)
Stock options exercised	147,254	223,087		4,226	3,491	
Tax benefit on exercise of stock options				2,307		
Treasury shares purchased			(94,197)			(3,206)
Balances December 31, 2001	20,483,051	(1,415,373)	(6,966,951)	25,386	(22,179)	(132,352)

On May 10, 2000, the company's shareholders approved a three-for-one stock split of both the issued and authorized common stock, which was distributed on May 24, 2000, to shareholders of record on May 12, 2000.

During 2000, the company purchased 2.1 million shares of common stock from a major shareholder for \$54.9 million. In a subsequent transaction, the company sold 1,125,000 shares of common stock that were held in treasury to the MSA Non-Contributory Pension Plan for Employees for \$27 million.

The Mine Safety Appliances Company Stock Compensation Trust was established to fund certain benefit plans, including employee stock options and awards. Shares held by the Stock Compensation Trust, and the corresponding cost of those shares, are reported as a reduction of common shares issued. Differences between the cost of the shares held by the Stock Compensation Trust and the market value of shares released for stock-related benefits are reflected in shares issued.

The company has a Shareholder Rights Plan under which each outstanding share of common stock is granted one-third of a preferred share purchase right. The rights are exercisable for a fraction of a share of preferred stock, only if a person or group acquires or commences a tender offer for 15% or more of the company's common stock. In the event a person or group acquires 15% or more of the outstanding common stock, each right not owned by that person or group will entitle the holder to purchase that number of shares of common stock having a value equal to twice the \$225 exercise price. The Board of Directors may redeem the rights for \$.01 per right at any time until ten days after the announcement that a 15% position has been acquired. The rights expire on February 21, 2007.

Note 10—Earnings per Share

Basic earnings per share is computed on the weighted average number of common shares outstanding during the period. Diluted earnings per share includes the effect of the weighted average stock options outstanding during the period, using the treasury stock method. Antidilutive options are not considered in computing diluted earnings per share.

	(In thousands)		
	2001	2000	1999
Net income	\$31,631	\$23,239	\$15,134
Preferred stock dividends	(48)	(49)	(50)
Income available to common shareholders	31,583	23,190	15,084
Basic shares outstanding	11,910	12,301	12,972
Stock options	169	55	33
Diluted shares outstanding	12,079	12,356	13,005
Antidilutive stock options	0	18	108

Note 11—Short-Term Debt

Short-term bank lines of credit amounted to \$20,109,000 of which \$17,942,000 was unused at December 31, 2001. Generally, these short-term lines of credit are renewable annually, and there are no significant commitment fees or compensating balance requirements. Short-term borrowings with banks, which exclude the current portion of long-term debt, were \$2,167,000 and \$1,288,000 at December 31, 2001 and 2000, respectively. The average month-end balance of total short-term borrowings during 2001 was \$4,157,000 while the maximum month-end balance of \$9,582,000 occurred at March 31, 2001. The average interest rate during 2001 was approximately 8% based upon total short-term interest expense divided by the average month-end balance outstanding, and 6% at year-end.

Note 12—Pensions and Other Postretirement Benefits

The company's non-contributory pension plans are accounted for in accordance with Statement of Financial Accounting Standards No. 87 which requires use of the projected unit credit cost method to determine the projected benefit obligation and plan cost. The principal U.S. plan is funded in compliance with the Employee Retirement Income Security Act (ERISA). It is the general policy to fund current costs for the international plans except in Germany and Mexico, where it is common practice and permissible under tax laws to accrue book reserves. A minimum liability is recognized for unfunded defined benefit plans for which the accumulated benefit obligation exceeds accrued pension costs. The amount of the minimum liability in excess of unrecognized prior service cost, net of tax benefit, is recorded as a reduction in shareholders' equity. Non-contributory plan benefits are generally based on years of service and employees' compensation during the last years of employment. Benefits are paid from funds previously provided to trustees or are paid by the company and charged to the book reserves.

During 2001, the principal U.S. and German non-contributory pension plans were amended to permit the payment of certain unfunded German benefits from assets of the U.S. plan. Under the terms of the amendments, the U.S. plan retroactively reimbursed the German company during 2001 for certain pension benefits paid in 1999 and 2000.

The company provides certain health care benefits and limited life insurance for retired employees and their eligible dependents, the costs for which are accounted for in accordance with Statement of Financial Accounting Standards (SFAS) No. 106. SFAS No. 106 requires recognition of retiree health and life insurance benefits during the employees' service with the company.

Information pertaining to defined benefit pension plans and other postretirement benefits plans, prepared in accordance with Statement of Financial Accounting Standards No. 132, is provided in the following table.

	(In thousands)			
	Pension Benefits		Other Benefits	
	2001	2000	2001	2000
Change in Benefit Obligations				
Benefit obligations at January 1	\$177,032	\$186,886	\$19,370	\$18,546
Service cost	4,645	4,358	502	409
Interest cost	12,393	12,537	1,488	1,390
Employee contributions	231	221		
Plan amendments		621		
Actuarial losses	14,594	1,281	2,484	858
Benefits paid	(11,998)	(12,540)	(2,009)	(1,833)
Curtailments	(167)	(332)		
Settlements	(1,245)	(12,460)		
Currency translation effects	(1,882)	(3,540)		
Benefit obligations at December 31	193,603	177,032	21,835	19,370
Change in Plan Assets				
Fair value of plan assets at January 1	324,824	341,250		
Actual return on plan assets	5,383	9,921		
Employer contributions	1,177	2,247	94	43
Employee contributions	231	221		
Benefits paid	(11,998)	(12,540)	(2,009)	(1,833)
Section 420 transfer to retiree medical plan	(1,915)	(1,790)	1,915	1,790
Reimbursement of German benefits paid in 1999 and 2000	(1,888)			
Settlements	(1,245)	(12,460)		
Currency translation effects	(447)	(2,025)		
Fair value of plan assets at December 31	314,122	324,824		
Funded Status				
Funded status at December 31	120,519	147,792	(21,835)	(19,370)
Unrecognized transition gains	(748)	(1,274)		
Unrecognized prior service cost	1,488	1,806	(957)	(1,065)
Unrecognized net actuarial (gains) losses	(65,695)	(106,703)	6,833	4,726
Prepaid (accrued) benefit cost	55,564	41,621	(15,959)	(15,709)
Amounts Recognized in the Balance Sheet				
Prepaid benefit cost	92,437	78,157		
Accrued benefit liability	(38,987)	(37,954)	(15,959)	(15,709)
Intangible asset	696	689		
Minimum pension liability adjustments	1,418	729		
Prepaid (accrued) benefit cost	55,564	41,621	(15,959)	(15,709)

	(In thousands, except percents)					
	Pension Benefits		Other Benefits			
	2001	2000	2001	2000		
Actuarial Assumptions at December 31						
Discount rate	7%	7%	7.5%	7.5%		
Expected return on plan assets.....	9%	9%				
Rate of compensation increases	4%	4%				
Plans with Accumulated Benefit Obligations in Excess of Plan Assets						
Projected benefit obligations.....	\$40,547	\$39,761				
Accumulated benefit obligations.....	37,759	38,329				
Plan assets	0	0				
(In thousands)						
	Pension Benefits			Other Benefits		
Components of Net Periodic Benefit Cost (Credit)	2001	2000	1999	2001	2000	1999
Service cost	\$ 4,645	\$ 4,358	\$ 5,426	\$ 502	\$ 409	\$ 437
Interest cost	12,393	12,537	13,049	1,488	1,390	1,212
Expected return on plan assets	(27,202)	(25,181)	(23,061)			
Amortization of transition asset.....	(597)	(624)	(703)			
Amortization of prior service cost	300	302	382	(108)	(108)	(8)
Recognized net actuarial (gains) losses	(4,745)	(3,914)	(2,487)	377	310	278
Settlement gain.....		(2,093)	(8,623)			
Curtailment loss (gain)	244	(285)				
Termination benefits			5,842			
Net periodic benefit cost (credit)	(14,962)	(14,900)	(10,175)	2,259	2,001	1,919

For measurement purposes, a 7.5% increase in the costs of covered health care benefits was assumed for the year 2001, decreasing by .5% for each successive year to 4% in 2008 and thereafter. A one-percentage-point change in assumed health care cost trend rates would have increased or decreased the other postretirement benefit obligations and current year plan expense by approximately \$1 million and \$200,000, respectively.

Expense for defined contribution pension plans was \$2,739,000 in 2001, \$2,619,000 in 2000, and \$2,750,000 in 1999.

At December 31, 2001, the U.S. defined benefit pension plan owned 1,072,500 shares (market value \$43.1 million) of the company's common stock. During 2001, the pension plan received dividends of \$601,200 on these shares.

Note 13—Acquisitions

On February 1, 2001, the company acquired Surety Manufacturing and Testing, Ltd. (Surety), a leading provider of fall protection equipment and rescue systems, for \$7.1 million. The acquisition was recorded using the purchase method of accounting. The purchase price was allocated to assets acquired and liabilities assumed based on estimated fair values and included \$5.6 million in goodwill, which is being amortized on a straight line basis over 20 years.

During 2000, the company acquired ISI Group, Inc. (ISIG), an established manufacturer of infrared thermal imaging cameras, and CairnsHELMETS (Cairns), a leading supplier of firefighter head protection. The acquisitions were recorded using the purchase method of accounting. The aggregate purchase price of \$29.7 million was allocated to the assets acquired and the liabilities assumed based on estimated fair values and included \$24.9 million in goodwill, which is being amortized on a straight line basis over 10 years for ISIG and 35 years for Cairns.

The acquisition agreement for ISIG provides for additional consideration to be paid to the seller annually based on a defined calculation of gross profit from the sale of certain thermal imaging cameras in 2000 through 2003. Additional consideration is charged to goodwill when paid and amortization expense adjusted accordingly.

The results of operations of Surety, ISIG and Cairns are included in the financial statements from their respective dates of acquisition.

The following unaudited pro forma summary presents information as if Surety, ISIG and Cairns had been acquired at January 1, 1999:

(In thousands, except earnings per share)	2000	1999
Net sales	\$516,537	\$522,385
Net income	23,721	15,794
Basic earnings per share	1.92	1.21

The pro forma amounts include certain adjustments, primarily to recognize goodwill amortization and interest expense, and do not recognize any benefits which may be achieved from combining operations. The pro forma information does not necessarily reflect the actual results that would have occurred and is not necessarily indicative of future results of operations of the combined companies.

Note 14—Leases

The company leases office space, manufacturing and warehouse facilities, automobiles and other equipment under operating lease arrangements. Automobiles leased under capital lease arrangements are included in other noncurrent assets. Rent expense was \$6,202,000 in 2001, \$6,120,000 in 2000, and \$5,813,000 in 1999. Minimum rental commitments under noncancelable operating and capital leases are \$2,974,000 in 2002, \$2,175,000 in 2003, \$1,315,000 in 2004, \$699,000 in 2005, \$473,000 in 2006, and \$3,254,000 after 2006.

Note 15—Accounts Receivable Securitization

Statement of Financial Accounting Standard No. 125, Accounting for Transfers and Servicing of Financial Assets and Extinguishment of Liabilities (FAS No. 125), applies a control-oriented, financial components approach to financial-asset-transfer transactions. Financial assets, net of retained interests, are removed from the balance sheet when the assets are sold and control is surrendered. In September 2000, FAS No. 125 was replaced by FAS No. 140 which revised certain accounting and disclosure requirements for securitizations and other transfers of financial assets, but carried over most FAS No. 125 provisions.

In November 1999, the company and Mine Safety Funding Corporation (MSF) entered into securitization agreements under which the company sells MSF, on a continuous basis, an undivided interest in eligible trade accounts receivable generated by the company, while maintaining a subordinated interest in a portion of the receivables. MSF is an unconsolidated wholly-owned, bankruptcy-remote subsidiary of the company. The company services the sold receivables for MSF at market rates and, accordingly, no servicing asset or liability has been recorded. MSF and the company have also entered into securitization agreements with financial institutions under which MSF may sell up to \$30 million of accounts receivable to a multi-seller asset-backed commercial paper issuer.

At December 31, 2001, accounts receivable of \$65.0 million were owned by MSF. The company held a subordinated interest in these receivables of \$39.3 million, of which \$38.3 million is classified as other receivables. Net proceeds to the company from the securitization arrangement were \$25.0 million at December 31, 2001. The company incurred net costs associated with the securitization facility of \$2.3 million in 2001, representing the discount loss on the sale of the receivables, partially offset by related servicing income and dividends received from MSF. The net cost is inclusive of \$598,000 in bad debt expense borne by MSF during 2001.

At December 31, 2000, accounts receivable of \$53.2 million were owned by MSF. The company held a subordinated interest in these receivables of \$31.5 million, of which \$30.5 million is classified as other receivables. Net proceeds to the company from the securitization arrangement were \$21.0 million at December 31, 2000. The company incurred net costs associated with the securitization facility of \$1.9 million in 2000, representing the discount loss on the sale of the receivables, partially offset by related servicing income and dividends received from MSF.

The key economic assumptions used to measure the retained interest at December 31, 2001 were a discount rate of 4.3% and an estimated life of 2.5 months. At December 31, 2001, an adverse change in the discount rate or estimated life of 10% and 20% would reduce the fair value of the retained interest by \$55,000 and \$110,000, respectively. The effect of hypothetical changes in fair value based on variations in assumptions should be used with caution and generally cannot be extrapolated. Additionally, the effect on the fair value of the retained interest of changing a particular assumption has been calculated without changing other assumptions. In reality, a change in one factor may result in changes in others.

Note 16—Change in Reporting Period

Beginning in 1999, certain international affiliates which had been consolidated based on fiscal years ending November 30 changed to fiscal years ending December 31. The after-tax effect of the change in reporting period is included in the 1999 income statement as a change in accounting principle.

	(In thousands)
Net sales	\$11,290
Cost of products sold	8,629
Selling, general and administrative	3,497
Depreciation and amortization	372
Facilities consolidation and restructuring charges	421
Other expenses, net	258
Income tax benefit	(695)
Change in reporting period, net of tax	(1,192)

Note 17—Recently Issued Accounting Standards

In June 2001, the Financial Accounting Standards Board (FASB) issued FAS No. 141, Business Combinations, and FAS No. 142, Goodwill and Other Intangible Assets. FAS No. 141, requires that the purchase method of accounting be used for all business combinations initiated after June 30, 2001 and establishes specific criteria for the recognition of intangible assets other than goodwill. There have been no material business combinations since June 30, 2001. The company does not expect the requirements of this statement to have a significant effect on its results or financial position. FAS No. 142, effective January 1, 2002, eliminates the periodic amortization of goodwill and instead requires an impairment review of goodwill balances at least annually. Goodwill amortization expense in 2001 was approximately \$2.2 million. At December 31, 2001, MSA had goodwill of \$33.7 million. Pursuant to FAS No. 142, MSA will test its goodwill for impairment upon adoption and, if impairment is indicated, record such impairment as a cumulative effect of accounting change. MSA is currently evaluating the effect that adoption may have on its results of operations and financial position.

In June 2001, the FASB issued FAS No. 143, Accounting for Asset Retirement Obligations. FAS No. 143 addresses accounting and reporting for legal obligations associated with the retirement of long-lived assets that result from the acquisition, construction or normal operation of such assets. The company will adopt FAS No. 143 as of January 1, 2003 and does not expect that the adoption of this statement will have a significant effect on its results or financial position.

In August 2001, the FASB issued FAS No. 144, Accounting for the Impairment or Disposal of Long-Lived Assets. FAS No. 144 addresses accounting and reporting for the impairment or disposal of long-lived assets. The company will adopt FAS No. 144 effective January 1, 2002 and does not expect that the adoption of this statement will have a significant effect on its results or financial position.

Note 18—Stock Plans

The 1998 Management Share Incentive Plan permits the granting of restricted stock awards and stock options to eligible key employees through March 2008. The 1990 Non-Employee Directors' Stock Option Plan, as amended April 1, 2001, provides for annual grants of stock options and restricted stock awards to eligible directors. As of December 31, 2001, there were 1,023,370 shares and 74,940 shares, respectively, reserved for future grants pursuant to these plans.

The company applies Accounting Principles Board Opinion 25 and related Interpretations in accounting for the plans. Accordingly, no compensation cost is recognized for stock option grants. Compensation cost for restricted stock awards is measured by the market value of the shares when awarded and is amortized by charges to operations over the period that the employee or non-employee director provides the service.

Restricted stock awards are granted without payment to the company in consideration of services to be performed in the ensuing four years for employees and three years for directors. Restricted stock awards of 860 shares, with a fair value of \$29.20 per share, were granted in 2001. Restricted stock awards of 19,760 shares (pre-split) with a fair value of \$63.06 per share, were granted in 2000. Restricted stock awards expense charged to operations was \$437,000 in 2001, \$547,000 in 2000, and \$448,000 in 1999.

Stock options are generally granted at market value option prices and expire after ten years (limited instances of option prices in excess of market value and expiration after five years). If compensation cost for stock option grants had been determined based on the fair value method provided in Statement of Financial Accounting Standards No. 123, proforma net income in 2001, 2000 and 1999 would have been \$30,112,000, \$21,775,000, and \$14,609,000 and earnings per basic share would have been \$2.52, \$1.77, and \$1.13, respectively. The fair value of the options granted was estimated at the grant date using the Black-Scholes option pricing model and the following weighted average assumptions for options granted in 2001, 2000, and 1999, respectively: risk-free interest rate of 5.2%, 7.0%, and 5.1%; dividend yield of 2.1%, 2.3%, and 2.0%; expected option life of 9.9 years, 9.8 years, and 9.7 years; and expected volatility factor of 23%, 19%, and 19%.

A summary of stock option activity under the two plans, adjusted to reflect the three-for-one stock split in May 2000, follows:

	2001		2000		1999	
	Weighted-Average		Weighted-Average		Weighted-Average	
	Shares	Exercise Price	Shares	Exercise Price	Shares	Exercise Price
Outstanding at beginning of year	544,794	\$20.08	305,379	\$19.24	215,715	\$18.25
Granted	244,344	25.38	267,120	21.11	101,844	21.24
Exercised	(370,341)	20.84	(4,290)	20.56	(12,180)	18.30
Forfeited	(5,310)	18.79	(23,415)	19.30		
Outstanding at end of year	413,487	22.55	544,794	20.08	305,379	19.24
Options exercisable at year-end	413,487		544,794		305,379	

The weighted average remaining contractual life of all options outstanding at December 31, 2001 was approximately 7.8 years. The weighted average remaining contractual life by exercise price range is summarized as follows:

Exercise prices of \$13.38 to \$19.00 - 3.4 years

Exercise prices of \$20.19 to \$23.88 - 7.2 years

Exercise prices of \$25.21 to \$29.20 - 9.2 years

Note 19—Quarterly Financial Information (Unaudited)

(In thousands, except earnings per share)

	2001					2000				
	Quarters					Quarters				
	1st	2nd	3rd	4th	Year	1st	2nd	3rd	4th	Year
Net sales	\$133,595	\$134,781	\$137,079	\$137,401	\$542,856	\$129,236	\$121,683	\$119,745	\$129,703	\$500,367
Gross profit	53,152	53,010	53,140	57,892	217,194	50,387	43,305	42,939	50,457	187,088
Net income	7,847	6,974	7,793	9,017	31,631	7,459	2,826	3,920	9,034	23,239
Basic earnings per share	.66	.59	.65	.75	2.65	.58	.22	.33	.76	1.89
Diluted earnings per share	.66	.58	.64	.73	2.61	.58	.22	.33	.76	1.88

Earnings per share information has been adjusted to reflect the three-for-one stock split in May 2000.

Summary of Selected Financial Data

Summary of Operations

(In thousands, except as noted)

	2001	2000	1999	1998	1997
Net sales	\$542,856	\$500,367	\$497,908	\$500,193	\$503,191
Other income	2,810	2,466	3,824	6,026	6,802
Cost of products sold (see note below)	325,662	313,279	318,174	315,761	306,280
Selling, general and administrative (see note below)	131,102	124,456	129,478	135,258	139,256
Depreciation and amortization	26,471	24,557	23,356	22,398	23,233
Interest expense	6,061	4,502	4,273	3,258	2,781
Currency exchange losses (gains)	1,197	(444)	(694)	315	40
Facilities consolidation and restructuring charges	2,287	2,433	3,960	1,021	2,164
Provision for income taxes	21,255	10,811	6,859	9,933	14,385
Income before change in reporting period	31,631	23,239	16,326	18,275	21,854
Change in reporting period, net of tax			(1,192)		
Net Income	31,631	23,239	15,134	18,275	21,854
Basic per common share (in dollars)	2.65	1.89	1.16	1.37	1.60
Diluted per common share (in dollars)	2.61	1.88	1.16	1.37	1.60
Dividends paid per common share (in dollars)	.54	.47	.44	.44	.41
Weighted average number of common shares outstanding—basic	11,910	12,301	12,972	13,290	13,608

Year-End Position

Working capital	\$135,186	\$114,175	\$123,085	\$119,203	\$116,373
Working capital ratio	2.6	2.3	2.5	2.1	2.1
Net property	152,968	159,586	163,509	164,561	157,957
Total assets	520,698	489,683	451,741	457,721	437,153
Long-term debt	67,381	71,806	36,550	11,919	12,270
Common shareholders' equity	252,451	225,382	241,374	241,743	240,004
Equity per common share (in dollars)	20.86	19.06	18.75	18.40	17.95
Market capitalization	485,844	297,169	274,624	310,904	291,858

Note:

Noncash pension income, pre-tax

\$14,962 \$14,900 \$10,175 \$10,344 \$10,881

Cost of products sold and selling, general and administrative expenses include noncash pension income.

Principal Operations

North America

Mine Safety Appliances Company,

Corporate Headquarters—Pittsburgh, PA

Manufacturing—Clifton, NJ; Cranberry Twp., PA;

Evans City, PA; Jacksonville, NC;

Murrysville, PA; Sparks, MD

Research—John T. Ryan Memorial Laboratory,

Cranberry Twp., PA

Callery Chemical, Evans City, PA

Rose Manufacturing Company, Englewood, CO

MSA Canada, Toronto

MSA de Mexico, S.A. de C.V., Mexico City

Europe

MSA Europe (Headquarters), Berlin, Germany

Aritron Instrument A.G., Forch, Switzerland

MSA Auer, Berlin, Germany

MSA-Auer Polska Sp. z o.o., Warsaw, Poland

MSA-Auer Hungaria Safety Technology, Budapest, Hungary

MSA-Auer Sicherheitstechnik Vertriebs GmbH, Absdorf, Austria

MSA Belgium, N.V., Lier

MSA (Britain) Limited, Glasgow

MSA Española, S.A., Barcelona

MSA de France, Paris

MSA Italiana S.p.A., Milan

MSA Nederland, B.V., Hoorn

MSA Nordic, Malmo, Sweden

Other International

MSA Africa (Pty.) Ltd., Johannesburg

MSA de Argentina S.A., Buenos Aires

MSA (Aust.) Pty. Limited, Sydney

MSA do Brasil Ltda., São Paulo

MSA de Chile Ltda., Santiago

MSA (India) Limited, Calcutta

MSA Japan Ltd., Tokyo

MSA Middle East, Abu Dhabi, U.A.E.

MSA del Peru S.A.C., Lima

MSA S.E. Asia Pte. Ltd., Singapore

MSA Zimbabwe (Pvt.) Limited, Harare

Sibertech, Novosibirsk, Russia

Wuxi-MSA Safety Equipment Co., Ltd., Wuxi, China (PRC)

Directors and Corporate Officers

Board of Directors

John T. Ryan III(1) (4)

Chairman of the Board and Chief Executive Officer

Joseph L. Calihan(2) (4)

Managing Partner—Bradford Capital Partners

(venture capital investments and acquisitions)

Calvin A. Campbell, Jr.(2) (3) (4)

Chairman, President and Chief Executive Officer

Goodman Equipment Corporation

(underground mining and tunneling locomotives and

plastics injection molding machinery parts and services)

Former Chairman—National Association of Manufacturers

James A. Cederna

Chairman, President and Chief Executive Officer

Calgon Carbon Corporation

(air and water purification)

Thomas B. Hotopp(1)

President

L. Edward Shaw, Jr.(3) (4)

Executive Vice President and

General Counsel—Aetna, Inc.

(health care and group benefits)

John C. Unkovic

Partner and General Counsel

Reed Smith LLP

(full service law firm)

Thomas H. Witmer (1) (2) (3)

Retired President and Chief Executive Officer—Medrad Inc.

(medical products manufacturer)

(1) Member of Executive Committee

(2) Member of Audit Committee

(3) Member of Compensation Committee

(4) Member of Nominating Committee

Director Emeritus

Eugene W. Merry

Corporate Officers

Chairman of the Board and Chief Executive Officer

John T. Ryan III

President

Thomas B. Hotopp

Vice Presidents

James H. Baillie

Joseph A. Bigler

Kerry M. Bove

Donald H. Cuozzo (Secretary and General Counsel)

Benedict DeMaria

William M. Lambert

George W. Stegges (Senior V.P.)

Dennis L. Zeitler (Chief Financial Officer and Treasurer)

Shareholders' Inquiries

A copy of the company's 2001 Annual Report on Form 10-K, as filed with the Securities and Exchange Commission, may be obtained by shareholders after April 1, 2002. Printed and electronic versions are available. Requests should be directed to the Vice President-Finance, who can be reached at one of the following:

Phone: 412-967-3046

Fax: 412-967-3367

Internet: MSAnet.com

U.S. Mail: MSA

Vice President-Finance

P.O. Box 426

Pittsburgh, PA 15230



Mine Safety Appliances Company
121 Gamma Drive
RIDC Industrial Park
O'Hara Township
Pittsburgh, PA 15238

412-967-3000
www.MSAnet.com